Feasibility Study for a Small Forest Landowner Cooperative in Lewis County, Washington

Final Report

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Introduction

In November of 2002, with the assistance of the United States Department of Agriculture (USDA), the Family Forest Foundation embarked on a feasibility study to determine the value of a small forest landowner co-operative for improving the economic and ecological viability of family forests in Lewis County. The central question to this project originally was: *by focusing on value-added processing and niche marketing, can landowners receive a premium return on timber harvested from their lands?*

The feasibility study was designed to answer this question through five primary research thrusts: 1) Conduct a survey to assess landowner interest in a business co-operative as well as inventory the timber, equipment, and technical skill base of the community; 2) Conduct educational outreach via a public scoping meeting and informational mailings to directly engage landowners in the conceptualization process; 3) Analyze existing landowner co-operatives nationwide to assess and learn from mistakes and successes; 4) Determine the appropriate business structure(s) under which a co-operative could most effectively be managed; and 5) Analyze potential markets and marketing strategies for high-value, locally produced and sustainably grown wood products.

The following were the primary objectives of the project:

- Develop and conduct landowner survey
- Research funding and technical assistance programs
- Research certification systems
- Research business structures
- Research market opportunities
- Meet with and tour existing cooperatives
- Produce feasibility study report

This Final Report is organized to first provide an Executive Summary and then a categorized list of key findings relating to the above objectives.

Executive Summary

Introduction

When the concept for a small forest landowner cooperative in Lewis County was first considered, and the funding proposal drafted to the USDA for conducting a feasibility study, the operating premise for a successful cooperative was: *by focusing on value-added processing and niche marketing, small forest landowners should be able to receive a premium return on timber harvested from their lands.* The feasibility study was thus developed to determine the validity of this premise. However, at the outset of the feasibility study, a very different question immediately arose that quickly became paramount to the previous premise: *do landowners in Lewis County have an interest in cooperating, and are there adequate forest resources to supply a marketing cooperative?* If not, then why form a cooperative? As this question eclipsed the original premise, the ensuing feasibility study evolved as an inventory of the small forest economy in Lewis County, an assessment of the successes and challenges of other cooperatives nationwide and a cataloging of the resources available to forestry cooperatives.

The desire to form a small forest landowner cooperative hinges on two basic questions. First, through coordination can landowners improve the quality and efficiency of their forest management operations? Second, by cooperating, can landowners gain a better market share and improve the value of the forest products they produce? It has long been the function of cooperatives to bring independent producers together to pool their resources, share their knowledge and sustain rural economies. Most landowner cooperatives are of an agricultural nature - producing products such as milk and cheese, grains, value-added fruit juices and others. There are few forestry coops in the United States, however, that are more than 5 years old.

The Economy

That small forest landowner cooperatives are a recent phenomenon is due in part to a historically robust timber market that has provided landowners a high value for their logs, thus alleviating the need to further organize for economic benefits. In a quickly globalizing economy, however, where natural resource based commodities are traded internationally, values for domestically produced forest products are no longer dependant solely on domestic markets. With goods traded easily across international boarders, the world has become a society of bargain shoppers seeking value over quality. In his paper, *Why Invest in Rural America?* Ken Stauber argues,

> Commodities compete on price. In a global market, rural America's historic competitive advantage of being a low-cost producer is largely gone. Rural America no longer [supplies] the world because other countries produce similar or higher quality commodities at a lower cost. Rural America used to be America's storehouse—today the world is America's storehouse. Agricultural rural America likes to claim, "We feed the world." In fact, rural America no longer feeds the world—it no longer feeds America. Today, America eats wherever it is convenient and cheap (Stauber 2001).

Over the past 10 years, timber producers in the Pacific Northwest have witnessed a significant downturn in the value of their forest products in domestic markets, in particular for logs of greater than 28 inches in diameter. Additionally, once robust export markets have dramatically declined as foreign markets have shifted towards manufactured wood products rather than solid wood products. The shut down of harvesting on most federal forest has also resulted in a decline in U.S. market share, and cheaper log imports from countries such as New Zealand, Canada and Europe are now out competing the United States for value. Therefore, an uncertain market, coupled with skyrocketing real estate values, has caused many family forest landowners to question the value of keeping their lands in forest use. Conversion to higher value uses has become epidemic in many parts of Washington State. In fact, the Pacific Northwest has experienced the most rapid declines in privately-owned timberland area in the United States. Pacific Northwest private timberland has decreased by nearly 10% since 1980, roughly from 19 million acres to 17 million acres. Current projections suggest continued decline, including a projected loss of over ½ million acres (3%) by 2020 (Kline 2000).

In addition to decreasing values, landowners are finding that the cost of producing forest products is increasing. Central to these cost increases are a series of state and federal regulations aimed at protecting specific ecosystem functions such as clean water and fish and wildlife habitat. A "broad brush" regulatory approach to forest conservation typically translates to limiting timber harvests and a need for landowners to hire professional consultants who understand increasingly complex state and federal laws. Both of these factors result in a loss of income and higher operating expenses for the landowner as well as a reduced ability to manage one's own land.

It is clear that America values its rural places. However, the qualities of rural areas that Americans value seems to be changing. Where once we valued the commodities that rural America produced, now we increasingly value the *services* it provides: recreation, aesthetics, clean air, clean water, and wildlife habitat to name but a few. Ensuring these services continue to be provided results in laws and regulations that affect the communities who rely on managing forests for their income and livelihoods. Although the need to conserve the many ecological functions of both public and private forests is indisputable, the methods with which we do so have yet to be defined in a context that also supports the economies of rural areas and the communities that dwell there.

Pursuing a market-based approach to conservation may provide part of the solution of how to sustain both ecological systems and rural economies. By investing directly in the commodities that are produced in the "backyard" of urban America, Americans can directly participate with every dollar they spend in the cost of providing the other public values they desire. In order for a market-based approach to conservation to work, however, two systems need to be in place. The first is a value system that compels American consumers to invest locally. Rather than seek the lowest value commodity of unknown origins, consumers must consciously decide to purchase those commodities produced in their own "backyard". The second is a delivery system that efficiently delivers commodities from rural areas to local markets in a manner that allows consumers to identify the origins of the commodity.

Family Forest Foundation

At its inception, the Family Forest Foundation was founded to address these complicated issues and has established four primary goals: 1) to create a mechanism for providing regulatory stability for family forest landowners, 2) to improve access to markets for family forest landowners, 3) to broaden the public's perception of the value of family forests, and 4) to create an enduring fiscal foundation for the conservation of family forests. Through this charter, the Foundation set forth to define a model of sustainable forestry that takes into account ecological, economic and social considerations. It is the underlying philosophy of the foundation that true sustainability will not be achieved if each of the latter three factors is not given equal precedence.

To address the ecological values family forestlands provide, in 2000 the Foundation embarked on the development of a Habitat Conservation Plan for small, family-owned forests in Washington State. When complete, the *Family Forest Habitat Conservation Plan* (FFHCP) will become the first multi-landowner and multi-species conservation plan in the nation for family forest landowners. A Habitat Conservation Plan (HCP) is a natural resource management plan developed by a landowner in consultation with federal wildlife agencies. An HCP details how impacts to wildlife habitat will be minimized during the course of conducting resource management activities (i.e. harvesting timber). The FFHCP will provide family forests long-term regulatory certainty against changes in state and federal regulations. At the same time, it will provide landowners the incentive to develop long-term management plans that grow and maintain wildlife habitat. If a landowner is willing to grow endangered species habitat (i.e. mature forest structure) and endangered species takes up residency on their property, the landowner should not be penalized for this good stewardship. With an HCP, landowners who grow endangered species habitat will no longer face the threat of having their ability to harvest timber taken away.

The Foundation believes that a scientifically credible forest stewardship plan is central to defining the stewardship ethic of family forests and the uniqueness of their management practices relative to other types of forest landowners (e.g. industrial, state and federal). With growing consumer interest in sustainably harvested forest products, a stewardship plan provides consumers the assurances they may be seeking that the forest products they purchase have been produced according to sound ecological principles.

To broaden consumers' understanding of family forests, the Foundation is beginning to engage in a public outreach campaign. Although most people are familiar with family farms, few are familiar with the notion of a family-owned forest. This disparity in understanding has resulted in family forests often being included in the same category as industrial forest landowners and public forestlands. Any misgivings the general public has towards current or historic management of "forestland" is translated indirectly to family forest landowners. As a result, "broad brush" regulations are developed that affect forest landowners as a whole, without regard for the unique stewardship family forest landowners apply to their property. Additionally, consumers are unable to differentiate between wood products produced from family forestlands or other ownerships. By

raising the public's awareness of family forests, the Foundation hopes to improve both public policy and public consumer interest in supporting family forests.

Feasibility Study

The Foundation's goal of improving markets for family forests and for bringing products to those markets has led it to investigate the viability of a small forest landowner cooperative. The term "cooperative" is used loosely throughout this study to refer more to "landowner cooperation" than the formal concept of a cooperative corporation. The Foundation recognizes many possible economic opportunities for small forest landowners that can be capitalized on by utilizing any number of business structures, including for-profit limited liability corporations, non-profit 501(C) 3 corporations and cooperative corporations to name but a few. Choosing how to organize the activities of landowners and how to organize the flow of products from their forestlands requires a site-specific approach as the culture of landowners and nature of their products is dramatically different from region to region.

Feasibility Study Questions

To better understand whether a landowner cooperative is a viable undertaking, the Foundation set forth to answer the following questions during the feasibility study.

- Can a cooperative provide a higher return to its members than if they were simply competing in the conventional timber market?
- What are the value-added wood products with the best potential to provide profitable returns to producers?
- What potential markets currently exist, or can be created, for value-added wood products at the local, regional and national levels?
- What services can a cooperative provide to assist landowners in the management of their forest resources?
- What lessons can be learned from the mistakes and successes of other forestry cooperatives?
- How do we define high-quality timber and what is the available volume of high-quality and other grades of timber resources in Lewis County?
- What technical and equipment resources are available within the Lewis County small forest landowner community?
- What is/are the most appropriate type of business structure(s) for a forestry cooperative?
- What funding and technical assistance programs are available from government and non-government sources to support the formation of a cooperative?
- Does certification provide a market advantage for selling timber products through a cooperative?
- What is the geographic limit to the membership base of a successful forestry cooperative?
- What role could state and federal forestlands play in providing timber resources to a cooperative?

- Could value-added secondary forest products play a significant role in a cooperatives product line?

Website

At the beginning of the feasibility study, a webpage was added to the Family Forest Foundation's website. The webpage has served as a clearinghouse of information collected over the course of the study and can be found at: www.familyforestfoundation.org.

Advisory Council

In late January 2003 the Family Forest Foundation convened an Advisory Council to discuss the feasibility study and make recommendations to the Board of the Foundation. The Advisory Council was comprised of a broad range of individuals representing small forest landowners, county officials, academic institutions, government agencies, and cooperative support organizations. The Advisory Council met once every two months for approximately 2 hours per meeting. Between meetings, members of the council met separately to discuss particular elements of the feasibility study and have reviewed and made recommendations to the Foundation.

Members of this Council have included:
Diane Gasaway: Northwest Cooperative Development Services
Jim Freed: Washington State Department of Natural Resources
Dennis Hadaller: Lewis County Commissioner
Doug Stinson: Cowlitz Ridge Tree Farm
John Henrikson: Wild Thyme Farm
Bill Lotto: Lewis County Economic Development Council
David Warren: Vashon Forest Stewards
Larry Mason: University of Washington
Steve Gibbs: Washington State Department of Natural Resources
Mike Maki: Agroforestry Associates

Family Forest Foundation

Steve Stinson: Executive Director is a second-generation family forester from Lewis County Washington where he is a partner in the Cowlitz Ridge Tree Farm. Steve graduated from the University of Washington College of Forest Resources with a Master's degree in Silviculture and did his undergraduate work at The Evergreen State College. Prior to his academic pursuits, Steve spent 12 years working in the timber industry. Professional affiliations include the Society of American Foresters and the Washington Farm Forestry Association.

Tom Fox: President is a small forest landowner that owns and manages 144 acres of forestland near Ethel Washington in Lewis county.Tom graduated from Lane Community College in Eugene Oregon with an Associate of Science degree in forestry in 1973.Tom has for the last 25 years been president of Tree Management Plus which is a forestry consulting and contracting business based in Lewis County Washington. TMP works almost exclusively for small forest landowners in the management of their forest

resources. Since 1997 Tom has been negotiating and attempting to obtain a 80 year HCP for his own forestland and was finally successful in May 2004. Tom serves on the Board of Directors of the Cispus Natural Resource Youth Camp, and is a Class 19 graduate of the Washington Agriculture and Forestry Leadership Program. Professional affiliations include the Washington Farm Forestry Association, Washington Contract Loggers Association, and the Society of American Foresters.

Steve Webster: Vice President: is a small forest landowner in Lewis County and has been involved with forestry for the past 37 years. Prior to his recent retirement, Steve worked as a Forestry Extension Agent for WSU Cooperative Extension. The focus of his work had been to assist and inspire family forest landowners to learn about and practice sustainable forestry. Prior to this, Steve worked as a forestry research scientist, specializing in tree nutrition and soil management. Steve has a Ph D in Forest Soils from North Carolina State University. He and his wife own and manage 120 acres of young Douglas-fir. Eighty of these acres have been in the family for four generations. Additionally, Steve is the managing general partner for the Webster Tree Farm, LP, which owns timber assets on 240 acres in Lewis County. He is an active and long-time member of the Washington Farm Forestry Association and the Society of American Foresters. Proud accomplishments include having been selected as Forester of the Year by the Washington State Society of American Foresters in 1993 and having been honored with recognition as a Fellow in the Society of American Foresters.

Bill Scheer, Jr.: Treasurer: has worked in the forestry industry for the past six years. Graduating in 1995 with a bachelor's degree in Economics from Willamette University, he immediately began managing his family's tree farm in Chehalis, Washington. An active member of the Chehalis community, he has served on the board for Lewis County Farm Forestry Association for the last four years, Treasurer for the Washington Farm Forestry Association and is an active member of the Centralia Rotary Club. He is a Class XXII graduate of the Washington Agriculture and Forestry Education Foundation program, which trains those in the natural resource industry to become leaders in their field of expertise, as well their communities. He lives on his family's tree farm in Chehalis with his wife of 5 years, their son Jack, their German shepherd Maggie and two cats.

Kernen Lien: Secretary: has worked in forestry since graduating from the University of Washington with a degree in forest management in 2000. In that time Kernen has provided technical assistance for case studies relating forestry concerns, been actively involved in the American Tree Farm System as a regional coordinator, and has been an Extension Coordinator out of the WSU Cooperative Extension office. Kernen will be pursuing a Masters of Environmental Studies from the Evergreen State College beginning in the fall of 2002.

Bill Scheer, Sr.: Board Member: is a small forest landowner in Lewis County. He and his son manage a 450-acre family farm as well as other forest land properties. Bill holds a Master's degree in Natural Sciences from Pacific Lutheran University and a Bachelor's degree in Horticulture from the Institute for Agriculture in the Netherlands. He is an

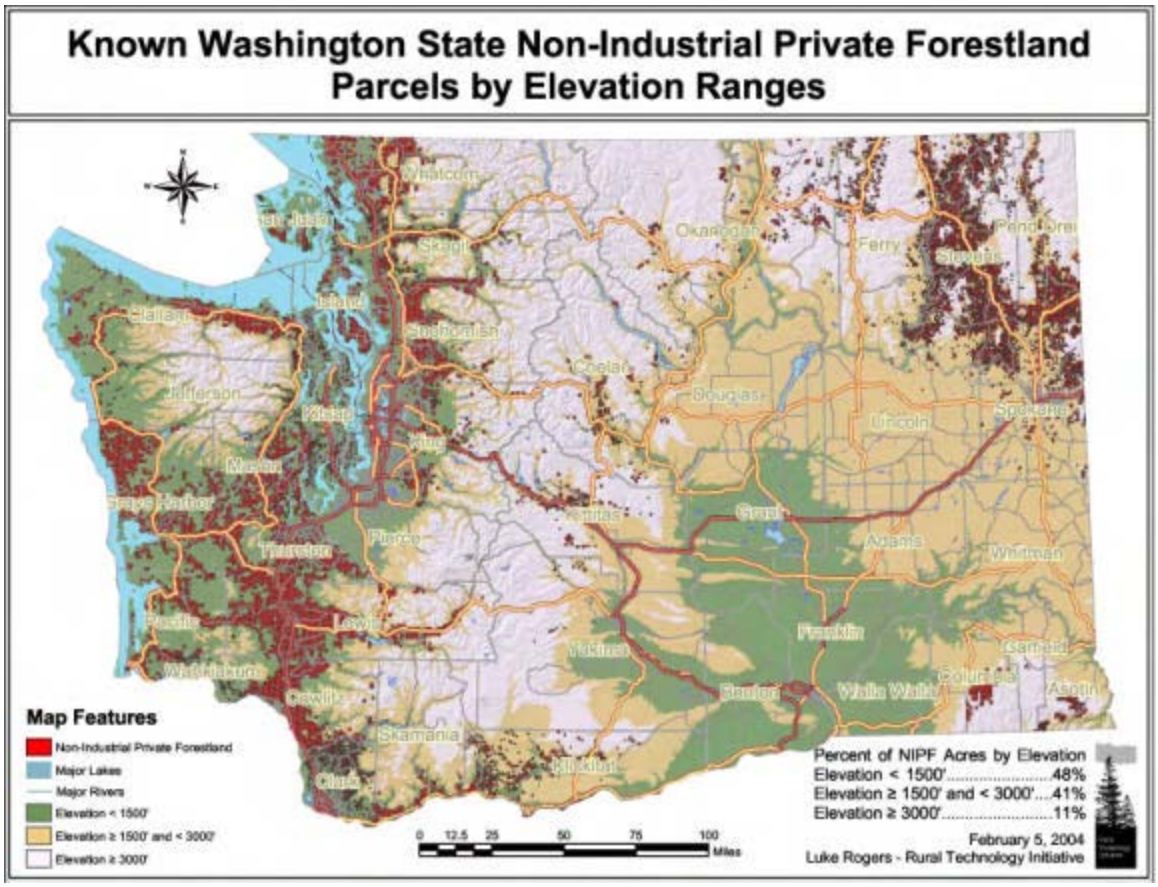
Emeritus faculty member of Washington State University in Horticultural Research and Extension. His experience in crop production is extensive and he has worked as a consultant in Central and South America, Asia and Europe. Professional affiliations include the Society of American Foresters, the Washington Farm Forestry Association, and the Western Washington Horticultural Association.

Kirk Hanson: Board Member: is a small forest landowner with a 40-acre tree farm near Oakville, WA where he manages a regenerating forest while also developing agroforestry systems for high-value timber and non-timber forest products. Kirk graduated from The Evergreen State College in 1995 with a Bachelor's degree emphasizing Sustainable Resource Management. Kirk has worked on the development of riparian buffers for agricultural areas with a focus on the ecological and economic benefits of actively managed agroforestry plantations. Over the past eight years he has organized public workshops on sustainable resource management and has helped numerous landowners develop alternative management approaches for their forests and farms.

Of People and Place: Demographics of Lewis County

Family Forests in Washington State

There are approximately 96,000 small family forests in Washington State who cumulatively manage nearly 19%, or 3.1 million acres, of productive forestland (Bolsinger, 1997). In general, their ownerships tend to be located in lower elevations on highly productive land in the interface between developing urban areas and the industrial and national forestlands of upper elevations.



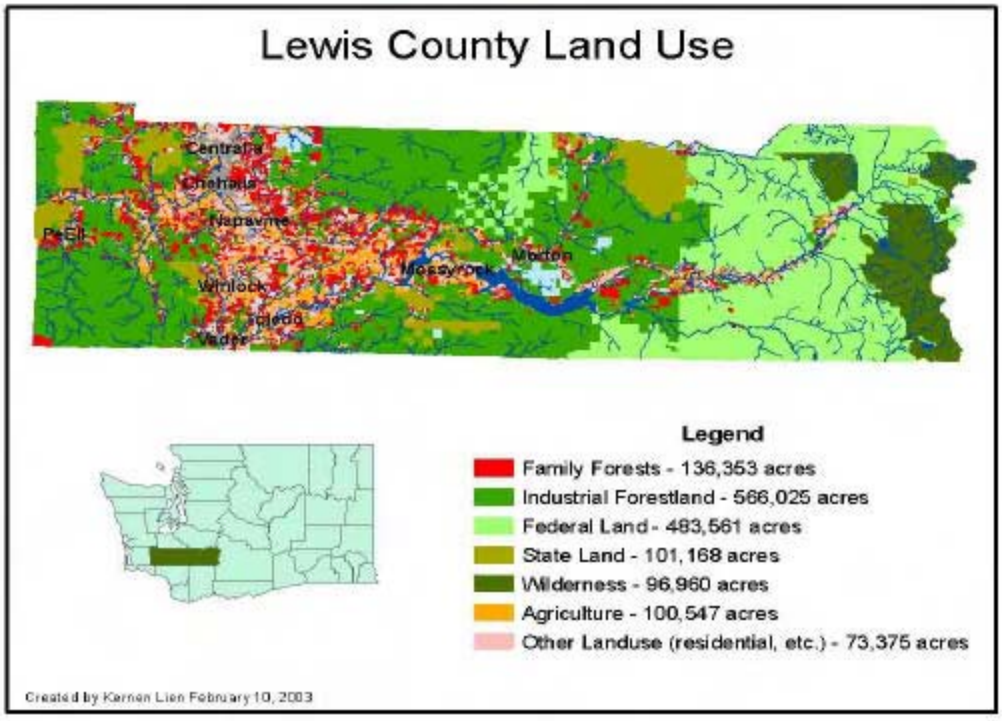
A recent study by WSU revealed that nearly 27% of family forestlands have fish-bearing streams occurring on them (Blatner 2000). In Washington State, 85% of all wildlife species depend on riparian areas for their habitat needs. It is also estimated that approximately 90% of currently listed endangered species depend on non-industrial private forestland for some of their habitat. While family forests are ecologically significant, these forests also have an importance to rural and state economies. Family forestlands produce nearly 30% of the volume of timber harvested annually in the state (Larsen 2000). The revenue generated from family forests represents real income; i.e. goods are produced from a renewable natural resource to provide a value-added commodity. These profits stay in the community, providing long-term economic viability and community health.

There have been substantial changes in family forestlands over the last decade driven largely by market instability, changing regulations and social pressures. Such economic uncertainty, in the face of skyrocketing real estate values, has caused many family forest landowners to question the value of keeping their lands in forest use. In fact, the Pacific Northwest has experienced the most rapid declines in private-owned timberland area in the United States. Pacific Northwest private timberland has decreased by nearly 10% since 1980, roughly from 19 million acres to 17 million acres. Current projections suggest continued decline, including a projected loss of over ½ million acres (3%) by 2020 (Kline 2000). Two recent surveys conducted by Washington State University and the Washington Farm Forestry Association also revealed that the average age of family forest landowners is between 57 - 67 years old, indicating that a large percentage of this forestland will change hands within the next 20 years (WFFA 1999).

Washington State represents some of the most fertile and productive forestland in the world. Despite this fact, the State is a net importer of round wood products by 22% (the US averages around 32%). At a time when technological and service-based economies are struggling, it is pertinent to focus on the development of a value-added manufacturing based for the renewable natural resource that Washington State grows best— quality timber and such associated public values as clean air and water, wildlife and salmon habitat.

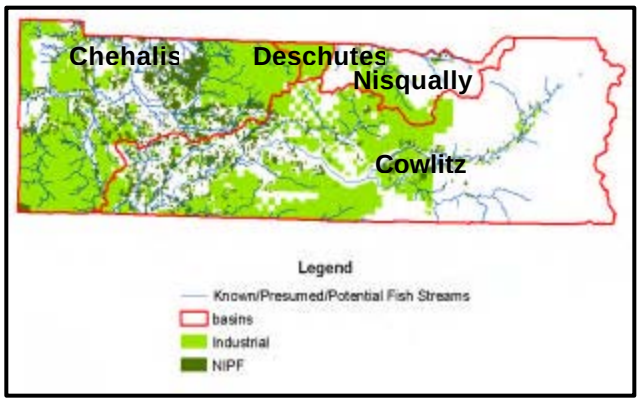
Family Forests in Lewis County

Lewis County is located in southwest Washington and extends from the Cascade Range west towards the Pacific coast. The county encompasses a total of 1,558,739 acres and is

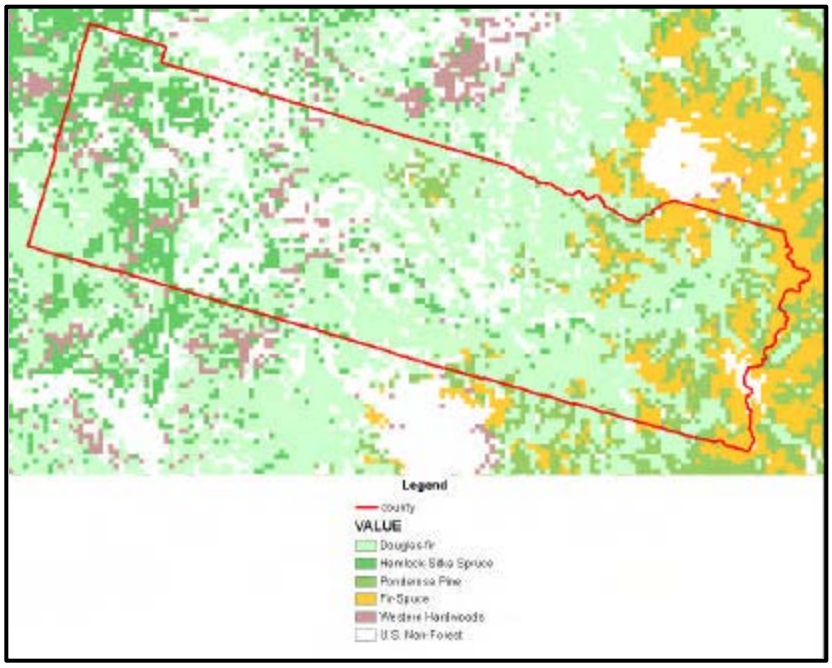


home to 68,600 citizens. Over 80 percent of Lewis County is forested and more than 2,200 family forest landowners (ownerships between 5-5000 acres in designated forest tax classifications) manage 9 percent, or 136,353 acres, of this forestland. Family forests tend to be located on highly productive low elevation land in the rural/urban interface.

The figure to the right illustrates the distribution of family forestlands throughout the county. The black lines running north and south along the west end of the county as well as east to west represent Interstate I-5 and State Highway 12 and 6 respectively. Centralia, the largest city in the county, and Chehalis, the county seat are located where I-5 and Highways 12 and 6 intersect.



The proximity of family forestlands to both urbanizing areas and major road systems has caused many analysts to draw a corollary between development pressure and the high rate of fragmentation and conversion of small forestlands statewide.
The county encompasses four major watersheds including the Deschutes, Nisqually, Chehalis and Cowlitz Rivers. These four river systems provide habitat to approximately 9 distinct species of salmonids, including Bull Trout, steelhead, Coho, chum sockeye and Chinook. Due to their location in the lower areas of a watershed, family forestlands have a high proportion of fish-bearing streams on their ownerships. In Lewis County, family forestlands provide approximately 367 miles of the 2,500 miles of fish habitat in the county.



Forest Types in Lewis County

Lewis County boasts some of the most productive forestlands in the Pacific Northwest. Historic factors such as volcanic activity and wildfires, combined with a high percent of alluvial bottomlands, have contributed to a series of soil classes that promote rapid growth of large trees. When rainfall from the Pacific Ocean is trapped by the Cascade Range on the east end

of the county, the combination of abundant moisture and highly productive soils creates an forest ecosystem that is capable of extraordinary vitality and productivity.

The dominant tree species in Lewis County are: Douglas fir, Hemlock, Western Red Cedar and a variety of hardwoods including alder, maple and cottonwood. Sitka Spruce and Ponderosa Pine occur in limited populations. Figure 6 illustrates the distribution tree species across the county. This data layer overlaid with the parcel layer for family forestlands shows that the predominant tree species on family forestlands are Douglas fir, western red cedar, Hemlock and various species of hardwoods. This was also validated by the countywide survey conducted of family forest landowners during the course of this feasibility study.

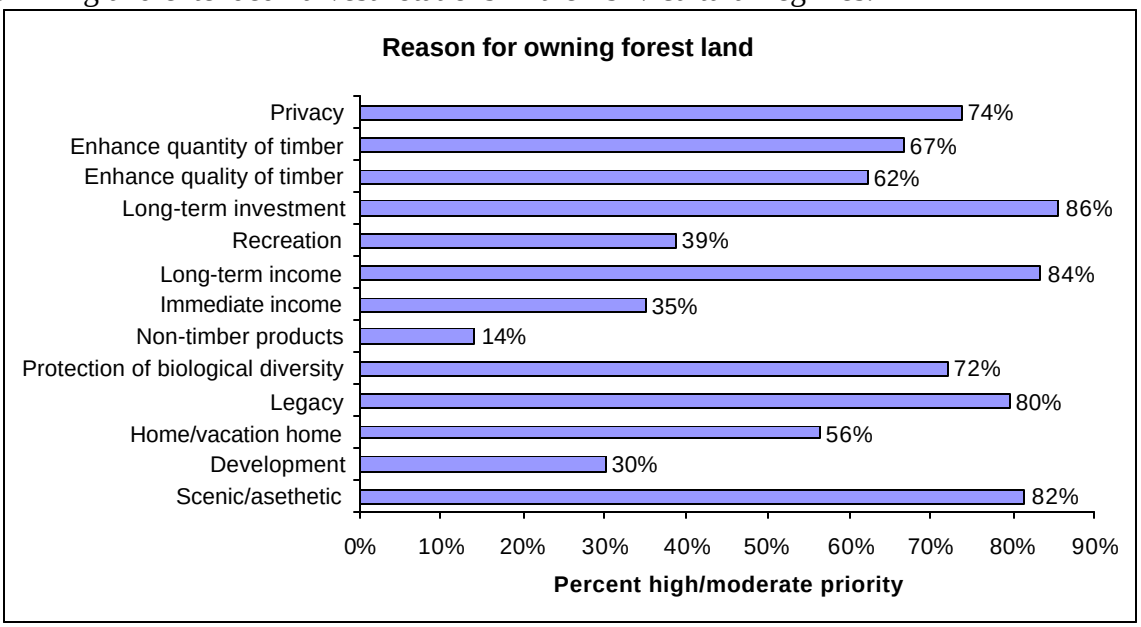
The Douglas-fir forests of Southwest Washington are dynamic ecosystems. The geography of family forestlands has a history of catastrophic fire events that replaced entire stands of forest every 50 to 100 years. As timber harvesting began to significantly increase towards the turn of the century, fire suppression efforts were increasingly utilized. The vast majority of the lower elevation private forestlands in Lewis County have been logged at least once during the past 150 years. These forests are now second and third generation stands, and stand replacing events now occur as either timber harvesting or clearing for agriculture or development. Regenerating second and third growth forests ranging in ages from 1-150 years now dominate this forested landscape. Family forest landowners own a significant amount of the older (> 50 years of age) forests remaining in the lower elevations.

100- year old 42" Douglas fir on the Cowlitz Ridge Tree Farm. Toledo. WA.

When timber harvesting on federally owned forests all but shut down in the mid 1990's to protect threatened and endangered wildlife species, the flow of large diameter timber to area mills nearly ceased. Mills that processed large logs either closed or retooled to process the smaller diameter second and third growth timber harvested on industrial forestlands. The current lack of milling capacity in the Pacific Northwest for large logs has led to an economic disincentive for forest landowners to grow medium to large diameter trees (e.g. 30"-60" dia.). Although large diameter logs arguably provide a higher grade of timber, ironically landowners receive a decreased value for these trees due to the added distance the logs must be trucked to the few remaining mills that can process them. Currently only three regional mills will buy the medium diameter logs, but since these logs do not provide the overrun of small diameter logs, mills decrease the value accordingly. Additionally, with fewer mills left to process large diameter logs, the lack of competition amongst these mills leads to lower prices paid for logs. The past 20 years have also seen an increasing shift towards the use of manufactured wood products in construction. Markets for uniform engineered floor joists and rafters for instance are expanding and are increasing their markets share over solid wood dimensional lumber.

As the age at which timber is harvested on industrial forestlands continues to decrease, family forestlands are becoming increasingly important for the habitat functions they provide for species that rely on the structural characteristics of older forests. Additionally, due to their proximity to national forests and other federal and state-owned forestlands, family forests provide significant wildlife habitat connectivity. The Gifford Pinchot National Forest, Goat Rocks Wilderness Area, and Mount Rainier National Park all exist in some portion within Lewis County. Habitat ranges for wildlife species such as the Northern spotted owl, bald eagles, songbirds, elk and cougar overlap across federal and family-owned forestland. Most species of salmon and trout in the watersheds of the region share habitat across multiple ownerships. This habitat connectivity is significant as it provides a corridor for wildlife to migrate between the large industrial forests in the coast mountains on the west end of the county to the federally-dominated forestlands in the Cascade Mountains on the east end of the county. The importance of these habitat corridors for the dispersal and migration of spotted owls, for example, are well recognized.

Lewis County family forest landowners exemplify a wide range of reasons for owning forestland and a wide range of management objectives. Since 1991, seven different family forest ownership surveys have been conducted at both the county and statewide level and a summary of the results is informative. Most striking are the differences in family forest ownership objectives when compared to publicly held industrial forest landowners who, by definition, must maximize net present value for share holders. When asked what their top management priorities are, over 75% of family forest landowners responded that long term income and investment as well as providing wildlife habitat, a legacy for their children, and aesthetics are a higher priority than immediate timber revenue. Department of Natural Resource data indicates that the rate of harvest on private forestland (including industrial forests) is less than 1% per year (Larsen 2000). Survey data also shows that the average regeneration harvest (clear-cut) on family forestland is about 20 acres, although current forest practices rules allow harvests of up to 200 acres (WAC 2001). Both figures indicate that family forest landowners utilize thinning and extended harvest rotations in their silvicultural regimes.

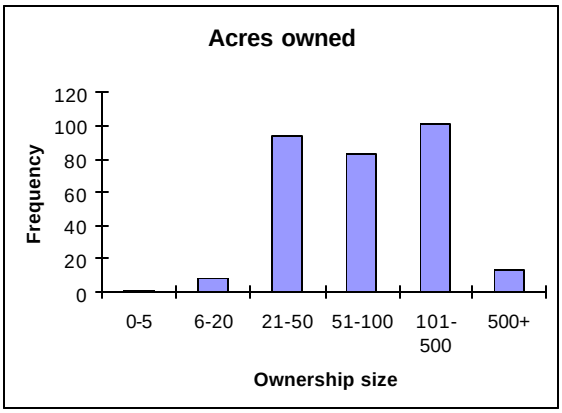


Landowner Demographics

In January the Family Forest Foundation contracted with the Washington State University's Social and Economic Sciences Research Center (WSU) to conduct a countywide survey of small forest landowners. The original scope of work called for a survey of 50%, or approximately 1,050, of the known small forest landowners in Lewis County. However, it was later determined that a smaller sample size would still yield statistically valid data. Therefore, in order to reduce the budget of this task, 800 landowners were selected. Since the Foundation was most interested in reaching those landowners who were actively managing their lands, members of the Lewis County Farm Forestry Association were targeted first; this amounted to 190 forest landowners. The remaining 610 family forest landowners were chosen randomly from the Lewis County tax assessor's roles. 325 completed surveys were returned yielding a completion rate of 43% and a standard error of ± 5%.

Ownership Demographics

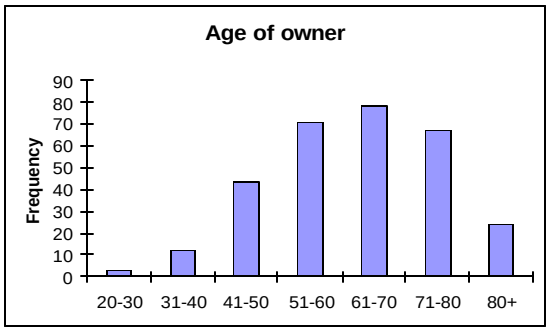
The following data represents a summary of ownership demographics for family forestlands. Data on landowners' educational interests, need for forest management services and willingness to participate in a coop occur later in this report. A full summary of the landowner survey can be found in Appendix C.



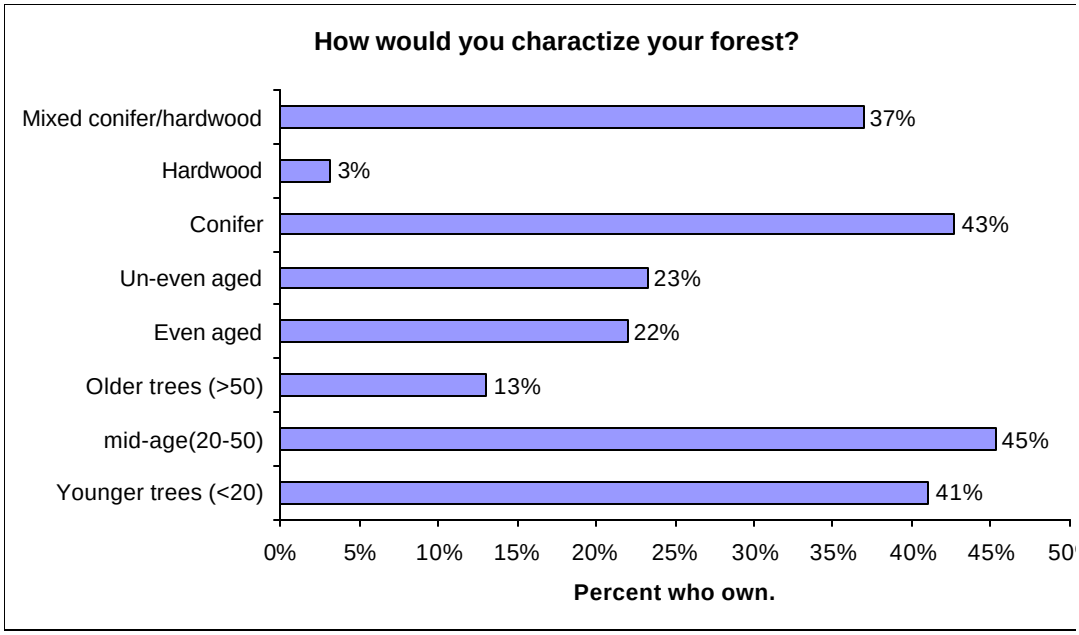
Respondents to the survey owned significantly larger parcels of forestland than the average family forest parcel size indicated in previous county and statewide surveys of small forest landowners. The total acreage of survey respondents was 55,149 acres, with a mean ownership size of 183 acres, and a median of 80 acres. In a statewide survey of 1,800 small forest landowners conducted by the Department of Natural Resources in 2001, the average parcel size was 40 acres (DNR 2002). Lewis County GIS analysis shows an average ownership of 67 acres.

The average age of the survey respondents was 63. This statistic is consistent with both the WFFA and WSU surveys which placed landowner's ages at 57 – 67 years old respectively. This statistic is interesting in that it implicates that the majority of family forestlands in Lewis County will be changing ownership within the next 10 – 20 years. The importance of estate planning for these landowners cannot be over-emphasized if the forestlands they manage are to remain in forest use after their tenure has ended. Indeed, landowners themselves expressed through this survey that estate planning was important to them, as it ranked fourth in importance behind: receiving help understanding the state

forest practices regulations, obtaining reliable information and receiving educational materials.



Forty-three percent of the respondents indicated they had a forest management plan. Nearly 50% of the survey recipients indicated that they anticipated conducting some type of management activity within the next five years - with planting trees, pruning, harvesting timber and building or maintaining roads as the top four activities mentioned. That making improvements to their forestlands ranked higher than harvesting timber is consistent with the fact that over 80% of respondents indicated they owned their forestland for long-term income and investment reasons rather than short-term. When asked what factors were most challenging to the ongoing management of their forests, over 50% of the survey respondents indicated that state and federal regulations and low timber values were the most significant challenges.



As would be expected for this region, conifers dominate family forestlands. Survey respondents indicated that 45% of their trees are 20-50 years of age; this in conjunction with the 13% of trees older than 50 years of age suggests that most family forest landowners own trees of a harvestable age.

Forestry Cooperative Tours

The Feasibility Study called for board members of the Family Forest Foundation to tour a variety of forestry co-ops throughout the Midwest and New England. Six unique organizations were selected, each representing a different business structure, range of services and array of products. In June, the Foundation met with four organizations in Wisconsin and Michigan. In July, the Foundation met with three organizations in Massachusetts and Vermont.

One of the most striking features common to each organization was the ingenuity and enthusiasm with which the participants pursued their goal of improving the viability of family forests in their region. Each region of the United States obviously presents a unique combination of social, environmental and economic factors such as the demographics of landowners, market conditions, manufacturing capacity, forest types, political climate, etc. Each organization, therefore, necessarily evolves as a response to these factors. The cooperatives the Foundation visited during the summer tours were exemplary at finding or creating niche markets, utilizing innovative technologies, developing unique products, providing unique services and gaining new efficiencies in forest management.

It should go without saying that no formula for a successful cooperative can be derived from the myriad of examples there are to draw from. Despite the verve and creativity expressed by the many forestry cooperatives across the United States, there has yet to be found an example of one that is completely financially self-sufficient let alone providing a higher return for forest products harvested from its members' lands. This is not to say that many cooperatives are not successful with providing other services to their members. Several coops the Foundation visited emphasized education and management services. Others were developing programs to promote eco-tourism, process low-value tree species develop brands that characterize a regional identity. Unique models of business management were being experimented with and computer models were being developed for inventorying logs and processed wood products.

The most prominent factors contributing to a coops early demise, or at least limited effectiveness, seemed to be over-capitalization and attempting to provide too many services during the early start-up phases. Other challenges facing cooperatives included: attempting to compete in the commodity market, maintaining membership and/or membership fees, overcoming grant-dependency and developing consumer awareness and brand recognition.

What follows is a summary of each of the forestry organizations the Foundation visited during the summer of 2003.

Midwest Forestry Cooperatives

Timbergreen Forestry

Jim Berkemier

Overview

Timbergreen Forestry is an individually owned business operated by Jim Berkemier near Spring Green, Wisconsin. Fed up with the way industry and state regulations were contributing to the high grading of forests in his region, Berkemier decided to provide forest management services to landowners him self as well as a high-value outlet for their forest products.

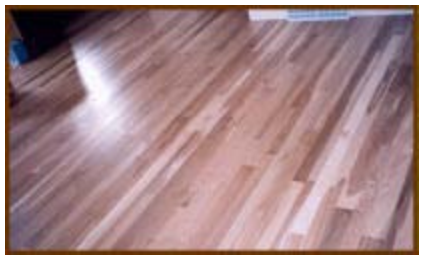
Berkemeir developed his business in response to five major issues facing family forests in his area:

- Conventional timber harvesting continued to high-grade forests
- There were no markets for small or defect trees
- Consultants and loggers provided unreliable services
- Marginal forests around farms were underutilized
- There were no markets for local wood products

Berkemier's specialty is processing low-value trees into high-value products. What he characterizes as "forest to floor" forestry, Berkemier helps landowners in his area improve the timber quality of their forests by removing suppressed, misshapen and otherwise low-value trees, and with small-scale processing equipment he converts this timber into high-value flooring. To capture full value from the timber he processes, Berkemier not only provides logging and manufacturing services, he also installs the flooring himself in homes throughout southwest Wisconsin.

Cutting straight flooring from a curved log

Timbergreen Forestry began as a Forest Stewardship Council (FSC) certified business in order to gain access to new markets for sustainably harvested forest products. However, Berkemier quickly became disenfranchised with the certification program due to its cost, the additional paperwork necessary to be certified, and the inability of FSC to provide access to additional markets. Berkemier has since dropped his certification status in favor of marketing his products himself.



Random length mixed species flooring

Berkemier's unique approach to both forest and small business management allows him to pay landowners for poor quality timber they may otherwise not be able to profit from in conventional markets. By adding and capturing the value of a log at every step from "forest-to-floor", Berkemier is also often able to pay landowners a small premium for commercial grade timber as well. Although the

individual tree selection thinning Berkemier utilizes may be more labor intensive and therefore more costly for landowners, his philosophy is that increased wood value through value added processing and direct marketing can pay for the services provided.

At the heart of Timbergreen Forestry's success is an ingenious array of small-scale processing equipment. Berkemier uses a logging arch developed by Future Forest Products, Incorporated from Portland, Oregon to yard logs up to 36" in diameter from the forest with a mid-sized tractor. At his farm, he mills logs using a Woodmizer bandsaw as well as a resaw, both of which are set up under a covered outdoor pole building. Milled wood is stickered and stacked into a series of inventive solar wood-drying kilns. Berkemier argues that solar wood drying yields the highest quality lumber due to the slower drying process that allows the moisture content of the wood to equalize with outdoor humidity during the night.

Solar kilns and millsite at Timbegreen

To make flooring, the dried lumber is rough cut to the approximate thickness and width, then sent through a Logosol 4-head moulder/planer designed in Sweden. The Logosol efficiently planes the wood and cuts the tongue and groove edges in one pass. Through these methods, Berkemier is able to utilize short pieces of straight wood cut from crooked sections of trees that otherwise would not be merchantable. This ability to recover maximum value from low-quality trees makes small-scale, individual tree selection forestry economically viable.

Berkemier producing flooring on a small-scale edger/moulder

Berkemier also showed a knack for turning the most seemingly useless branch or block of scrap wood into a value-added product. One of the more popular ideas is the $60 twig. Berkemier takes an oak or walnut branch of certain girth, cuts it to length, and then fixes it to his lathe for turning into the shaft of a pen. With about $2.50 invested in hardware, the local wood pens retail in some places for up to $60.

High Value pens from low-value wood.

Lessons Learned

- Innovative value-added processing adds value to all aspects of a forest (e.g. adding value to low-value trees, wooden pens from branches, etc.)
- Don't compete in conventional commodity markets; develop unique products
- Coop must be fully integrated from harvesting to marketing
- First initial customers should be members of the coop
- Provide a source of reliable forest management services
- Develop demonstration/retail site where customers can observe forest management and value-added processing
- Direct marketing to consumer/homeowner reduces middleman

Sustainable Woods Cooperative

Berkemier was also one of the figures instrumental in developing perhaps the most famous of forestry cooperatives, the Sustainable Woods Cooperative, also located near Spring Green, Wisconsin. The Sustainable Woods Cooperative (SWC) was one of the early forerunners of family forest cooperatives in the United States. Incorporated in 1995, the SWC sought to improve the economic viability of family forests by providing forest management services, processing facilities and marketing of self-branded forest products to local and regional markets.

Solar kiln at Sustainable Woods Cooperative

The SWC began as a full-service cooperative and therefore required extensive initial capital investments to purchase logs, establish a sort-yard, construct solar kilns, implement a marketing campaign and pay staff. The SWC was given a strong start funded in part by member investments, bank loans and a series of grants from the United States Department of Agriculture Rural Business Program. Set up to sell custom cut lumber and value-added wood products such as flooring, siding and paneling, the cooperative grew quickly in volume but struggled to develop market recognition or a significant customer base. The coop was also hampered by an inadequate inventory system; therefore quantities and qualities of warehoused wood products were not readily known or made available to customers. Sales through the cooperative did not develop to a sufficient degree in time to service the mounting debt and the cooperative closed its doors in 2003.

Lessons learned

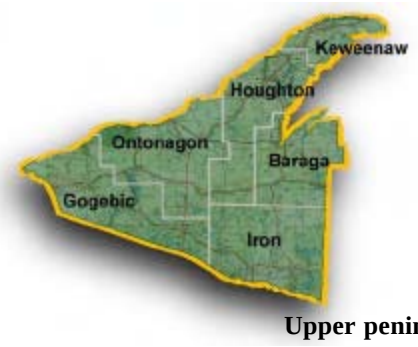
- Don't grow to quick
- Don't overcapitalize
- Keep control of inventory of logs and finished products
- Keep control of quality of products produced

- Develop customer base prior to producing large quantities of inventory

Western Upper Peninsula Forest Improvement District

The Western Upper Peninsula Forest Improvement District (District) is a forestry cooperative in northern Michigan with over 150,000 member acres. The District focuses on woodland management, harvesting, and timber sales services for its members, rather than the production and marketing of value-added wood products. According to Richard Bolen, president of the District, the cooperative has been able to receive a return on their members' timber that is 15% above average stumpage values (the standard price that a wood buyer pays for standing timber) (Bolen 2003).

The District is a cooperative of both public and non-industrial private landowners that was organized to provide quality forest management services to landowners throughout Michigan''s Western Upper Peninsula.



Upper peninsular Michigan

The District was originally formed under the Forest Improvement Act (298 of 1980 as amended by Act 214 of 1984) as a five-year pilot project to demonstrate the feasibility of a landowner-based forest improvement district. The economic and social issues the District began to address at the time are still quite relevant today and include:

- A rural economy that once prospered on timber and mineral extraction has now become depressed
- The history of forest management in the region was one of high-grading
- Forests in the region are overlooked as a valuable resource and therefore under-utilized by many landowners
- Michigan state has very few guidelines governing the management of forests
- Many landowners are uninformed about forest stewardship


Tour of WUPFID managed forest

Operations began on October 1, 1985 as a state funded agency. Since that time, the District has continued beyond the state funded/pilot phase, into a self-funded forest management and marketing cooperative.

The District's Mission is threefold:

- Provide members with sound forest management, healthy forests and economic gain.
- Provide services at the most economical cost.
- Ensure forests are sustained for future generations.

The forested landscape the District oversees is one characterized by a history of high grading. The old-growth white pine forests that existed prior to European settlement were systematically harvested and never replanted nor properly managed in the ensuing years. Consequently, the forests of Upper Peninsula of Michigan, much like the rest of the Midwest, grew back haphazardly with a predominance of hardwoods such as aspen, birch and shrub alder as well as low-value conifers such as hemlock.

Since 1986, the District has been responsible for the inventory, cover-type mapping, and development of quality forest management plans for over 1,000 forest landowners encompassing over 230,000 acres of forestland. With the District's assistance, these members also conduct an average of 70 timber sales per year. The District manages its own sort yard and obtains greater market leverage by pooling timber volumes and selling larger batches of graded timber.

The District also elected to become certified under the Sustainable Forestry Initiative (SFI). SFI provided a set of guidelines the District was able to use to develop management plans for its members. The certification status also verifies that timber harvested from member lands has been done so in accordance with environmental standards and has helped the District develop a name for itself as a good steward of the land.

There are two particularly encouraging lessons to be learned from the District: 1) Their ability to coordinate timber sales from members over a multi-county area; and 2) their success in establishing long-term, reliable, and equitable relationships with buyers. Despite the vast ownership base and seeming success at improving stumpage values, however, the District has had difficulty maintaining a cash flow sufficient to manage the administrative functions of the cooperative. The 15% premium on timber sales obtained by managing their own sort yard is not quite sufficient to pay full time staff as well as return some portion to the landowners. The District has also struggled with membership dues. Of the more than 900 members in the organization, less than half submit even the most minimal of annual membership dues.

The District is currently in the process of reassessing its operations and reinventing itself. Realizing that as a state agency it had become dependant on state funding, the District is gradually beginning to restructure in order to become an economically viable cooperative corporation. Future options for the District include developing a wider range of services

for members to maintain member participation, formalizing the process for collecting annual membership dues, developing strategies for including absentee landowners and considering value-added processing.

Lessons learned

- Do not be grant dependant; if beginning with grant funding, develop timeline for becoming financially self-sufficient
- Develop an adequate annual membership dues system
- Provide wider range of services to maintain landowner interest
- Value-added processing may provide higher returns
- State or federal legislation may be sought to promote "forest improvement districts"
- Careful managed of sort yard can yield higher profits
- 15% additional profits generated by sort yard, however, may not be enough to cover overhead of business and provide additional revenue to landowners

Living Forests Cooperative

Living forest Cooperative is a bioregional timber management, processing, and marketing enterprise in Wisconsin that began with nearly 3,000 acres among its members. LFC was incorporated in the spring of 2000 with the goal of producing value added forest products from forests certified as sustainably managed. LFC has produced quality custom wood products for the retail and wholesale markets, provided forest stewardship assistance to private woodland owners, and maximized returns to coop members through a vertically integrated cooperative that controls raw materials, processing, marketing and installation of products. The mission of LFC is to restore the northern forest ecosystem on private lands through economically rewarding sustainable forest management.

Incorporated in 2000 as a cooperative corporation, LFC has grown to nearly 80 members encompassing over 8,000 acres of forestland. LFC employs one full time manager and one 2/3 time office assistant. Much like the previous two organizations visited in the Midwest, LFC was developed to address a range of challenges facing small forest landowners and their forests including:

- A history of high graded forests
- No markets for low-value trees
- No markets for sustainably grown forest products
- Absentee landowners who are unfamiliar with forest management
- Unreliable forest consultants and loggers

LFC began with many of the same ambitions as the Sustainable Woods Cooperative. It provided a wide range of educational and forest management services to members, contracted with local processors to produce value-added wood products such as flooring, rough cut lumber and siding, maintained a wholesale warehouse and actively sought markets for the wood products harvested from its members' forests.

LFC developed as an innovative cooperative that employed a series of unique strategies to improve the forest economy in its region. The first was to become FSC certified in order to gain access to newly emerging markets for sustainably harvested forest products. Additionally, LFC sought to work with existing loggers, processors and manufacturers to better utilize the resources immediately available to it. A suite of high-value wood products were developed ranging from cabinets, flooring, paneling and millwork. LFC coordinated with local contractors to have much of its wood products directly installed in local homes thereby gaining additional values through serving as its own retailer. LFC also developed a wide range of trainings and educational programs for its members including workshops on grading timber, utilizing small-scale timber harvesting equipment, and general forest management.

Value-added wood products produced by the Living Forest Coop

In the first year of operation, LFC was primarily grant funded. In its second and third years, the cooperative evolved into a self-funded organization with income coming from member contributions ($100 annual membership fee), fees charged to members for services ($35/hr for forest management services) and sales of value-added forest products. However, much like the Sustainable Woods Cooperative in neighboring Wisconsin, the LFC quickly discovered that its suite of services had grown beyond its capacity to cost effectively provide these services. The daunting task of providing forest management services, coordinating timber harvests and processing of logs, contracting with local manufacturers, maintaining a warehouse, seeking niche markets for value-added items and producing educational workshops consistently enough to maintain member interest in the organization soon overwhelmed the small staff and limited budget of LFC.

Like WUPFID, LFC is currently in the process of reevaluating the services it provides and is considering scaling back. The two biggest challenges the cooperative faced were finding markets for its forest products that paid a high enough premium to warrant the additional work necessary to process and sell wood products on a small scale and minimizing high start-up costs. The market access and premium values the coop hoped FSC certification would yield never materialized and the additional administrative costs necessary to maintain certification diminished the economic viability of the organization. Additionally, the cost of maintaining a wholesale warehouse did not provide any additional advantage in terms of customers having more immediate access to the products

the cooperative was producing. Inactive members also presented a challenge to LFC as it struggled to provide services that maintained inactive landowners' interest in the coop. Low membership dues also reduced LFC's ability to generate sufficient income to maintain its suite of member services. LFC is now scaling back its operations and will instead focus on forest management services and educational events.

Lessons Learned

- Each member should initially contribute a "pick-up truck" worth of capital in order to provide start-up funds for a cooperative
- A coop should focus on services first (e.g. management, education, etc.), the evolve into processing and marketing later
- Rather than seek to provide a broad range of general services, a coop should capitalize on the strengths of its board and/or start-up group of landowners
- Warehousing inventory can be expensive

New England Forestry Cooperatives

Vermont Family Forests

Vermont Family Forests (VFF) is a non-profit corporation that has been working with landowners for the past four years to actively manage their forests to be ecologically sustainable and economically rewarding. Harvesting and processing are contracted through existing local businesses. VFF targets markets that provide a premium price for certified, value-added products. According to David Brynn, a State of Vermont forester, who works with VFF, *landowners have been able to realize a net return on their wood that is about two times stumpage value.* Although VFF operates on a small scale and contracts out most processing activities, it shows that a landowner organization can provide members with a value-added return – including a premium for certified wood.

In his work as Addison County Forester, VFF founder David Brynn saw, time and again, that owners of small tracts of forestland lacked the resources-in terms of both information and financial incentives-to ecologically manage their woodlands. Brynn launched VFF to fill that void, offering training to landowners through public workshops and one-on-one guidance and creating financial incentives for ecological forestry through the fledgling green-certification marketplace. He hoped to foster a new approach to forestry, one in which the ecological integrity of the forest was the central concern, around which all management decisions turned.

In 1995, VFF began to promote the careful cultivation of local family forests for ecological, economic, and social benefits. Since that time, VFF has sponsored workshops on a variety of forest-related subjects including portable sawmills, solar wood drying kilns, wildlife habitat, chain saw safety, riparian zone restoration, wood identification, timber grading, and water quality protection. These sessions provide ''non-

professionals'' with tools to practice sustainable forestry. VFF created and adopted a set of voluntary forest management checklist designed to protect site productivity, water quality, and biological diversity.

In 1998, Vermont Family Forests provided 31 family forest owners with affordable access to independent ''green'' certification by SmartWood®. Green certification began in the early 1990s to allow wood product customers to purchase forest products that come from sustainable forest management. VFF secured a grant from the Vermont Sustainable Jobs Fund for The VFF Green Certification Project. The goals of this project are to:

- Promote the use of sustainable forestry practices on family forests
- Improve the financial returns of family forest stewardship
- Increase the availability of sustainably-produced, locally-grown forest products to local wood product manufacturers
- Develop an affordable model for independent green certification

Trim from VFF in Middlebury College

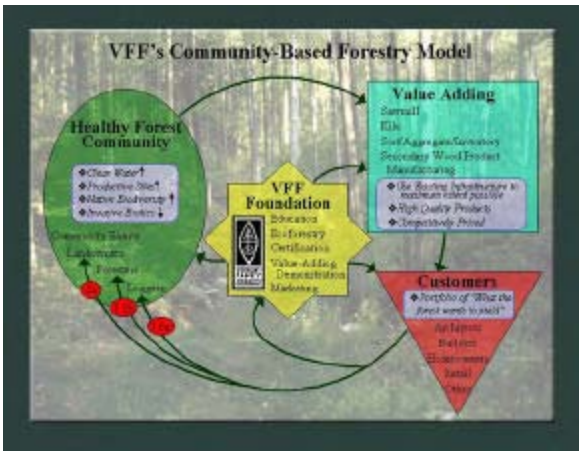
On June 24, 1998, the 31 VFF-affiliated forestlands, ranging from 32 to 1757 acres and totaling 4,718 forested acres, became the first in Vermont to be formally SmartWood-certified. Shortly after that, VFF sold its first certified lumber, supplying much of the 125,000 board feet needed for the new Middlebury College science center, known as Bicentennial Hall. All of the professional forestry, timber harvesting, and trucking, and a portion of the saw milling and drying was conducted by Vermont firms. Loggers received about 60% more for their services, landowners received roughly twice the market stumpage rate, and Middlebury College obtained the wood products it required at prices just above the market norm.

Timbers supplied by VFF

VFF has since trademarked its own brand of forest products, the Family Forest® brand, and is expanding its consumer outreach efforts to establish familiarity within the region for the brand. VFF has been quite successful with identifying niche markets that pay premium prices for forest products. Aside from supplying Middlebury University with interior trim and paneling, VFF has also supplied boat makers, local barn builders and other value-added manufacturers with timber from its participating landowners.

Perhaps VFF's greatest strengths have been with utilizing existing local processors and manufacturers, developing recognition of its own brand, establishing high-end markets, and developing a unique business model for carrying out its mission. Currently VFF is incorporated as a 501(c) 3 non-profit corporation and as such provides educational

programs and management planning for its participating landowners. As a non-profit, VFF is able to attract grant funds to develop its suite of conservation-based programs for its participating landowners. However, as VFF begins to explore value-added marketing, it is also considering creating a commercial subsidiary, VFF LLC, that will oversee the value adding and marketing of Family Forest® branded forest products. A for-profit corporation, managed by a group of private investors, will have more incentive to generate profits for its shareholders and will have more flexibility to make quick decisions in response to changes in market conditions. If the for-profit corporation is successful in generating profits, it can guarantee a supply of timber by returning some of its profits to the producers it purchases from. This combination of a non-profit and for-profit corporation has great potential to limit the responsibilities of any one business while emphasizing the strengths of each type of business.



VFF's business model

Challenges VFF has faced over time have centered on making the links between producers, processors and manufacturers and consumers more efficient. The work necessary to move timber from a landowner, through the processing chain and eventually to a consumer has proven to require a great deal of management with the attendant costs limiting the final net revenues generated. The process of developing brand recognition has also been slow and VFF is beginning to realize that there may be competition between its brand and other forest products labeled by FSC. David Brynn is beginning to lose interest in FSC certification, as the FSC label has not generated the additional price premiums to justify the additional costs of staying certified.

Lessons learned

•Combining a non-profit foundation and for-profit LLC has advantages
•Developing a local brand creates product differentiation in the marketplace
•Utilizing existing processing and manufacturing facilities minimizes the need for the coop to perform these functions
•Targeting high-end markets provides higher returns on products
•Competing in the commodity market is to difficult for small-scale producers
•FSC is expensive and may be competitive with a local brand

Massachusetts Woodlands Cooperative

Massachusetts Woodlands Cooperative is a forest landowner management, processing and marketing cooperative organized by and on behalf of forest landowners in western Massachusetts. The mission of the Cooperative is to maintain the environment and

Massachusetts Woodlands Cooperative

A Landowner Cooperative for Western Massachusetts

character of western Massachusetts through the protection, enhancement and careful economic development of one of the region's most plentiful resources, the forest.

In October of 1999, a group of 18 landowners (along with some consulting foresters, sawmill operators, and loggers) began meeting to discuss the possibility of forming a forest cooperative in western Massachusetts. The response during the initial series of meetings was quite positive and, as a result, the group formed a Steering Committee made up of landowners. The Steering Committee's task was to: (1) explore the idea of a forest cooperative in greater depth; (2) develop an initial set of guidelines for such a forest cooperative; and (3) determine the extent of interest among landowners in western Massachusetts. The cooperative was incorporated as the Massachusetts Woodlands Cooperative in the summer of 2001.

Decking

While still in the planning stages, the Massachusetts Woodlands Cooperative will operate as a business that is designed to increase the knowledge and bargaining power of individual landowners. A Board of Directors provides oversight and direction to the Cooperative with support from a twelve member Working Group of landowners and resource personnel who were involved in creating the Cooperative. Profits generated by the Cooperative will be returned to the members in proportion to their use of the Cooperative.

The Cooperative is currently preparing a detailed business plan that will delineate goals and strategies for helping the Cooperative become a profitable business. Cooperative members are involved in the process as a means of educating them and helping them understand how to implement the business plan once it has been developed. As an integral part of the business planning process, the Cooperative will gather information on regional markets for green certified products and/or services with a special focus on markets for small diameter and traditionally lesser-valued species. In addition, the Cooperative will conduct an assessment of the ways in which green certification might enhance the marketability of Cooperative forest products.

Local branding

Central to the Cooperatives future success at marketing its wood products is its ability to take advantage of a growing consumer interest in

purchasing locally produced farm and forest products. The state is currently engaged in developing a program to label farm and forest products that originate in western Massachusetts.

In the fall of 2000, the University of Massachusetts conducted a Forest Landowner Interest Survey on behalf of the Cooperative's Steering Committee. One purpose of the survey was to determine the types of services that forest landowners value that might be provided by the Cooperative. The survey was mailed to 923 forest landowners in the four western Counties of Massachusetts with responses obtained from 232 landowners (25%) who collectively manage a total of 61,568 acres of forestland. The forest landowners who responded to the survey expressed an interest in the following services:

Forestry Services

1. Identification of reliable foresters, loggers and other operators
2. Guidance in the preparation of forest management plans
3. Arranging for necessary permits
4. Assistance in meeting green certification standards
5. Conducting timber stand improvement activities
6. Supervision of all harvest management activities
7. Hauling of trees to the sort yard
8. Arranging for the bartering of services and equipment among members
9. Processing members' "own-use" custom orders (by contract)
10. Establishing a Forestry Resource Center for equipment rental, the sale of tools and supplies, etc.

Lessons learned

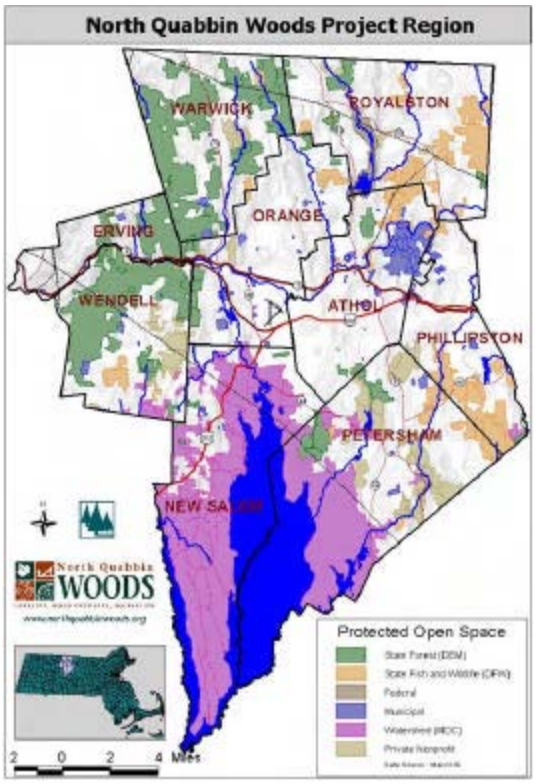
- Utilize the talents and resources of the initial board members and participants
- Seek support from local universities and organizations that provide technical support
- Start with a low capital approach that focuses on uniting landowners and providing management services
- Survey landowners and develop a suite of programs that is reflective of their needs

North Quabbin Woods Project

North Quabbin WOODS
FORESTRY, WOOD PRODUCTS, RECREATION

The North Quabbin Woods Project (Project) is a subprogram of the New England Forestry Foundation, a 90-year old organization dedicated to the conservation of the New England countryside. The goal of the project is to revitalize the North Quabbin economy based on the sustainable use of local forest

resources. The North Quabbin Woods Project is supported by the Ford Foundation, as a part of their National Community Forestry Demonstration Program.



The program started in September 2000, and is expected to run until 2005. The North Quabbin Woods Project evolved primarily out of a need to address the declining rural economy in northwestern Massachusetts. Tremendous development pressures from the more urban eastern side of the state have been increasingly eroding the rural character of the west as well as having a detrimental impact on the environment. Additionally, the forest resources of Massachusetts have been severely neglected for generations. When agriculture and grazing began declining in the state generations ago, mixed species forests grew back in the former fields. These forests were rarely managed for timber production and as a consequence the quality of the timber is currently quite poor. The lack of attention on timber production has resulted in virtually no manufacturing capacity for timber in the state. As a consequence, 90% of the timber harvested in the state is exported and 90% of the lumber used in the state is imported.

Another serious factor facing forest landowners in the state is the strong preservationist attitude imposed by urban populations. Although voters in the state support conservation of the forest resources, there is little consumer support for good forest stewardship. Additionally, many forest landowners own their property for reasons other than timber production. Aesthetics, wildlife habitat and recreation rank high in the reasons landowners own their property. With these issues in mind, the North Quabbin Woods Project evolved to reconnect consumers with the rural character of western Massachusetts, provide a source of sustainably harvested forest products and assist landowners with learning how to manage their forestlands for a range of benefits.

Wood products display

Project initiatives include:

- **Educating landowners about sustainable forest management.** The Project hosts a regular series of

workshops for local landowners on topics ranging from forest thinning to timber taxes, from chainsaw safety to sawmill tours. The Project also convenes the Coverts Program, an intensive four-day seminar about forestry and wildlife management for local opinion leaders, who are charged with educating their neighborhoods and communities about forest management.

- **Marketing locally made wood products under a brand label**. In partnership with the North Quabbin Chamber of Commerce, the Project organized a display of over twenty local wood businesses and their products. The display travels the region and the state, making stops at a variety of public spaces, including local bank lobbies and the State House.
- **Ecotourism.** The Project is starting a training program to help local residents establish themselves as forest guides, who will offer tours of the region to locals and outside visitors of the natural and cultural history of the region. The program offers leadership, first aid, business skills, and natural and cultural history in order to make effective guides who can lead educational, safe, profitable, and fun tours of the region.
- **Raising Community Awareness** about the economic, social, and environmental roles that forests play in the region. Through workshops, wood products display, logo placement, and regular media coverage, the Project is working to promote the themes that forests matter in the local economy.

The North Quabbin Woods Project began as a grant-funded program with support coming from both the New England Forestry Foundation and the Ford Foundation. The goal of the program is to become financially self-sufficient by the end of 2005 when support from the Ford Foundation ends. The Project is currently struggling with its ability to make its programs pay for themselves. Although it has been quite successful in developing a strong network of landowners, processors and wood workers, the markets for regionally branded products have proven to be difficult to establish. The Project became FSC certified in order to provide consumer recognition for environmentally produced forest products, however, certification has not yet yielded any market advantage for the Project's participating landowners.

Lessons learned

•Building regional brand/identity may be more productive than certification
•Eco-tourism can draw consumers into an area and develop brand recognition
•Plan to evolve beyond grant dependency
•Assist local wood products manufacturers to better market their wares

Business Structures

Although the primary focus of this feasibility study has been on a co-operative corporation, other forms of for-profit and not-for-profit business structures were also looked at. The strongest principle for determining a business structure should be to choose one that appropriately addresses the functions of the business. Most forestry cooperatives perform a range of functions for their members including: education, marketing, management services, operating a log sort yard, processing, eco-tourism, etc. Although a cooperative corporation allows for each of the business activities above, these activities can also be performed by combinations of business types such as a partnership between a limited liability corporation (LLC) and a not-for-profit 501(c) 3 corporation. In this situation, the LLC can perform for profit activities such as marketing, operating a log sort yard, processing, etc. while the 501(c) 3 corporation can serve as a recipient for grant and membership for while providing the educational programs, public outreach and consumer awareness campaigns, and forest monitoring and management services.

Theoretical forestry coop business model

Today's IRS tax code allows for numerous types of business structures including: individually owned businesses, partnerships, corporations, cooperatives and limited liability companies. There are pros and cons, strengths and drawbacks to each type of business. A new start-up organization must carefully consider its business plan and the functions it intends to perform over both the short and long terms before decided under which tax structure to incorporate. There are four key considerations that inform what type of business may be the most appropriate: 1) who owns the business, 2) who controls the business, 3) who buys from the business and 4) who gets the profits? There is nothing limiting an organization from incorporating as one type of business, then developing a second business (and perhaps different type of business) in later years that can perform additional functions or perform current functions more effectively.

What follows is a summary of each of the four most common business types. These summaries have been paraphrased from the USDA's Cooperative Information Report 55 titled Co-ops 101: An Introduction to Cooperatives (USDA 1997).

Individually Owned Business

The individually owned business is the oldest and most common form. One person owns, controls and conducts the business. Characteristics of individually owned businesses include:

- **Control**. The owner is responsible for management, makes all the major operational decisions an sets the business policies
- **Capital**. The owner supplies the equity and is responsible for all debts.
- **Earnings**. Profits belong to the owner.
- **Taxes**. Profits are taxed once, as income of the owner.
- **Life**. The life of the individually owned business is tied to the one owner. It continues until the owner sells the business, retires or dies. At that point the business is either taken over by a new owner or discontinued.

Many farms are operated as individually owned businesses. Other examples of business commonly operated by an individual owner include service stations, hardware stores, restaurants, flower shops and dry cleaners.

Partnership

Partnerships consist of two or more people who jointly own, control and operate a business. The responsibilities of each are usually based on a partnership agreement. Characteristics of partnerships include:

- **Control**. Partners usually share management and make policy decisions by mutual agreement or majority vote. Some agreements provide for senior partners whose votes may carry greater degrees of weight. A manager may also be hired to make day-to-day management decisions.
- **Capital**. Partners provide the equity capital. Usually, each partner is personally liable, up to the value of all the property he or she owns (both within and outside the partnership), for the debts of the partnership. Some partnerships have "limited" partners, who relinquish any voice in managing the business in exchange for a limit on their personal liability.
- **Earnings**. Profits (or losses) are shared by the partners in accordance with the terms of the partnership agreement. This is usually determined by the amount of capital invested and the nature of the work performed by each partner.
- **Taxes**. Earnings are taxed once, as income of the partners.
- **Life**. The life of the partnership as a business is determined by the partners, but if one dies or leaves the organization, it often must be dissolved and a new partnership formed.

Some farms are owned and operated on a partnership basis. Other examples include law and accounting firms, insurance and real estate companies. Partnerships may operate an auto repair firm, store and any other business.

Corporation

Most businesses that have more than a small number of owners are organized as corporations. Corporations are legal entities, authorized by law to act much like an individual person. A corporation has the right to provide services, own property, borrow money, enter into contracts and is liable for its own debts. A general business corporation operates as a profit-making enterprise for its investors, who are also referred to as stock-holders. Most of the major companies in America operate as general business corporations. Their characteristics include:

- **Control**. Management is controlled by a board of directors and officers who are elected by the stockholders. Each stockholder usually has as many votes as the number of shares of voting stock he/she owns. Business decisions and policy are made by the board and officers. The directors have no obligation to use the firms products or services and may have no contact with the firm outside of board meetings.
- **Capital**. Equity is raised by selling shares of stock to investors for their profit-making potential. The corporation is responsible for its own debts. If the business fails, each owner of stock can lose only the amount invested.
- **Earnings**. Profits are distributed to stockholders as dividends according to the number of shares of stock owned or used to expand the business. The timing and amount of such dividend distributions are decided by the board of directors.
- **Taxes**. Earnings are taxed twice, as income of the corporation when earned and as income of the stockholders when distributed as dividends.
- **Life**. A corporation enjoys a continuing existence, regardless of changes that may occur in the ranks of its shareholder owners.

Examples of investor-oriented corporations are large department stores, chain grocery stores, regional banks, automobile manufacturers and much of the communications industry.

Cooperative Corporation

A cooperative is also a state-chartered business, organized and operating as a corporation under applicable state laws. Cooperative attributes are:

- **Control**. Management is controlled by a board of directors who are elected by the members. One unique feature of a cooperative is that each member usually has only one vote in selecting directors, regardless of the amount of equity that member has in the cooperative. Another is that all or most of the directors must be members of the cooperative. Thus, the leaders are regular users of the firm's products or services.
- **Capital**. Equity comes from the members, rather than outside investors. It is obtained by direct contributions through membership fees or sale of stock, by agreement with members to withhold a portion of net income based on patronage, or through retention of a portion of sales proceeds for each unit of product marketed. If a cooperative fails, the liability of each member is limited to the amount he/she has invested.
- **Earnings**. Earnings (or losses) on business conducted on a cooperative basis, often called margins, are allocated to the members on the basis of the use they made of the cooperative during the year, not on the basis of equity held. The allocations may be distributed in cash or retained as additional equity. Members usually receive a combination of cash and an allocation of equity.
- **Taxes**. Earnings from business with members are taxed once, either as income of the corporation when earned or as income of the members when allocated to them.
- **Life**. A cooperative usually has a perpetual existence. Members can routinely join or resign without disrupting ongoing operations.

Limited Liability Corporation

Another form of business gaining widespread attention is the limited liability company (LLC). It combines the single-tax treatment of a partnership and the limited personal liability of owners of a corporation. Characteristics of an LLC include:

- **Control**. The owners, called members as in a cooperative, may share management and make policy decisions by mutual agreement or majority vote, or turn the management over to nonmembers. The operating agreement among the members determines voting rights of each member.
- **Capital**. Members usually provide the equity capital. Liability of the members is usually limited to their investment in the corporation.
- **Earnings**. Profits (or losses) are shared by the members in accordance with the terms of the operating agreement. This is usually based on the amount of capital invested and the nature of the work performed by each member.
- **Taxes**. The Treasury Department assumes an LLC wants to be taxed as a partnership. However, an LLC has the option to elect to be taxed as a general business corporation.
- **Life**. An LLC may have a perpetual existence, or the members may chose to be governed by the partnership rules.

The LLC is still developing as a business structure. It is already proving a useful vehicle for organizing joint ventures among established corporations, including those involving cooperative and noncooperative firms. Whether it can be used to organize a number of individuals, who may want the flexibility to join and leave the venture at will, is undetermined at this time.

Not-for-profit 501(c)3 Corporation

Nonprofit organizations include a wide variety of activist, civic, religious, public service, and public broadcasting organizations that work in the public interest rather than the goal of making money and may operate at the local, state, national, or international level. To qualify for nonprofit status in the United States, an organization must be approved by the IRS. The organization is then exempt from paying taxes which would be levied on a for-profit business.

- **Control**. A non-profit corporation is managed by a board of directors and elected officers.
- **Capital**. Working capital can be raised through any number of means including: grants, membership dues, fee for services,
- **Earnings**. Legally, a nonprofit organization is one that does not declare a profit and instead utilizes all revenue available after normal operating expenses in service to the public interest. These organizations can be unincorporated or incorporated. An unincorporated nonprofit cannot be given federal tax-exempt status or the designation of being a 501(c)(3) organization as defined by the Internal Revenue Service. When a nonprofit organization is incorporated, it shares many traits with for-profit corporations except that there are no shareholders.
- **Taxes**. When a nonprofit corporation is given tax-exempt status, it is exempt from paying federal corporate income tax. While these types of organizations also are often exempt from paying state and local sales tax, property tax and taxes on other assets, this is not always the case as states have different rules.

- **Life**. A non-profit organization may exist in perpetuity or be dissolved by an action of the board of directors.

Conclusion

The Family Forest Foundation realizes that family forests in Lewis County could benefit from a wide range of services including forest management services, marketing services and educational services. Currently the Foundation is incorporated as a non-profit 501(c) 3 corporation and as such is well suited for providing educational and forest management services to landowners. The Foundation's immediate mission is to develop a programmatic habitat conservation plan for family forests and deliver the necessary education and services to assist landowners with developing the implementing HCP. At this point in time no change to its business structure would be necessary to continue to deliver these services.

The ultimate marketing solution for the Northwest's family forest landowners may not be a "true cooperative model, but a different business entity such as a local corporation. Corporations have most, if not all the advantages of cooperatives, and almost none of their disadvantages.

- The one-member, one-vote situation of cooperatives does not blend well with the "self-reliant individual" characteristic of landowners of the US West. In a corporation, landowners are shareholders, and profits are divided according to the number of shares of each landowner.
- The share mechanism also avoids the flat upfront fee of coops, which does not differentiate between big and small. Still, the corporation needs to raise money: by the sale of shares to the participant landowners.
- Mechanisms to protect small shareholders are available: for example, the constitution of the corporation may state that 2 from a 5-member board of directors must represent small landowners.
- Alternatively, forest landowners can organize themselves in a limited liability companies (LLC). LLCs are taxed as a partnership, and offer the limited liability of corporations.
- There are two main product types that a corporation of landowners can target: commodity and niche/specialty products. It is suggested that corporations should provide totally different assistance in the two product types.
    - Regarding commodities, corporations can help landowners by establishing a log sort yard, thus gaining bargaining power for their members. The ideal complement to the log sort yard is a joint venture with a processor, discussed later.
    - Regarding specialty products, corporations can promote educational activities in order to inform landowners of the available niche markets, and their potential.
- A main task of the corporation is the development of a successful log sort yard. Alternatively, a standing inventory of the pool of members is an option. This inventory would have to be intentionally reduced by 20 or 30% in order to have a buffer against landowners that decide not to harvest (Wagner 1999).

Perhaps the most intriguing business arrangement the Foundation witnessed during its tour of forestry cooperatives was Vermont Family Forests. Currently VFF is incorporated as a 501(c) 3 non-profit corporation and provides educational programs and management planning for its participating landowners. As a non-profit, VFF is able to attract grant funds to develop its suite of conservation-based programs for its participating landowners. However, as VFF begins to explore value-added marketing, it is also considering creating a commercial subsidiary that will oversee the value adding and marketing of Family Forest® branded forest products. A for-profit corporation, managed by a group of private investors, will have more incentive to generate profits for its shareholders and will have more flexibility to make quick decisions in response to changes in market conditions. If the for-profit corporation is successful in generating profits, it can guarantee a supply of timber by returning some of its profits to the producers it purchases from. This combination of a non-profit and for-profit corporation has great potential to limit the responsibilities of any one business while emphasizing the strengths of each type of business. This potential combination of structures will require further investigation of the legal and accounting procedures required for such a structure to be successful.

Market Opportunities

"It is the marketplace that provides financial incentive – that ultimately dictates how our forests are managed. If you attempt to dictate forest management through command and control mechanisms, there is no real incentive to improve the way forests are managed and we are all left with an industry pursuing minimum requirements. Take away the economic benefit from productive forestry and its possible to take away the incentive to maintain the forest cover on the land at all (Ford 2000).

One central question to this feasibility study revolved around the availability of markets for wood products harvested from family forestlands. The Foundation is examining conventional markets for raw, unprocessed logs; niche markets for certified wood; raising consumer awareness and creating niche markets for locally grown wood products; and markets for secondary forest products.

Perhaps the most significant challenge for a marketing cooperative is determining which are the most practical markets to enter first? Consideration is being given to two primary approaches; 1) pooling logs via a sort yard to gain market leverage by selling larger volumes of specialty grade logs to domestic and foreign markets, or 2) to add-value to logs by milling, drying and processing into high-value wood products such as flooring, siding, moulding, timbers, etc. The tours of the forestry cooperatives in the Midwest and New England provided a sobering insight into the challenges of both competing in existing commodity markets and creating new markets for value-added and/or self-branded products.

In the scope of work for the feasibility study, it was mentioned that major retailers such as Home Depot, Lowe's, Lumberman's and other locally owned lumber yards would be contacted to solicit their interest in selling locally produced wood products. After conversations with wood products marketers as well as managers of other forestry co-ops, it has been determined that these retail outlets present significant challenges for small, start-up organizations. This is primarily due to the extreme competitiveness of other wood products suppliers to these chains, the low margin expected from selling commodity lumber products, and the policies of several stores to only purchase wood products supplied by national suppliers. Most of the major retail stores listed above have company policies stating support for certified or otherwise sustainably harvested wood products. A cooperative may be the only vehicle by which small producers can expect to provide the volume of lumber necessary to warrant a store carrying their product. None-the-less, the sales pitch to these stores may have already been made if a cooperative can provide either certified or locally branded wood products. Indeed, in recent months, Home Depot, Lowe's and Lumberman's between Seattle and Central Oregon have begun stocking small volumes of FSC certified wood products manufactured from local forests. For family forest landowners to be truly competitive in conventional markets it may imperative for them to eventually gain access to commodity markets such as major retail outlets. In order to do so, a certain scale of production and consistency in quality must be achieved in order to provide consistent supply. The role of a cooperative in coordinating timber harvests across many fragmented parcels is essential; and the ability to pool logs in a sort yard ready to be shipped to larger mills will be a necessary service. If a cooperative can send larger mills adequate volumes of logs, the mill may be able to segregate the finished product and return it to the cooperative for resale under a special brand. This "chain of custody" handling is also necessary for wood products to be sold under a certified label.

More opportunities may exist for smaller organizations to produce specialty products such as oversized timbers, flooring, logs for home building, character wood for craftsmen, and other high-value products.

Self-branding

Sustainable Woods Coop logo

In order to gain market differentiation for forest products produced from family forestlands, some form of identity must be attached to the product. This identity could come through certification, the development of a unique brand name or other strategies. In order to develop consumer recognition of the forest products they were producing, several organizations the Family Forest Foundation visited were developing their own brand. Vermont Family Forests trademarked the name Family Forest® and is marketing value-added forest products under this label. The Sustainable Woods Cooperative conducted significant market research on the efficacy of a variety of labels to gain consumer recognition. The North Quabbin Woods Project also is attempting to develop a regional identity for forest products produced from western Massachusetts small woodlots. More close to home, Sustainable Northwest's Healthy

Forests, Healthy Communities Partnership is also endeavoring to develop market recognition for the forest products produced within its network of partners.

Self-branding presents several inherent challenges for small start-up organizations. If professional marketing services are retained to provide technical assistance with developing a label or brand image, costs for such services may exceed the initial income of a new organization. Additionally, the time it takes to develop consumer recognition of a brand may cause an excessive delay in receiving any additional price premiums the special brand achieves. However, if an organization develops its brand gradually and with minimal expectation of receiving immediate consumer recognition or financial returns, the long-term benefits of a brand for distinguishing an organization's products may pay off in the end.

Sustainable Northwests' Healthy Forests, Healthy Communities Logo

In a study conducted by the University of Wisconsin Center for cooperatives, survey results suggest that although consumers of cooperative products believe that product quality between conventional and cooperative retail outlets is perceived as being similar, consumers are more likely to purchase cooperative products at slightly higher prices in order to assist in building their community (Shook 2001).

Local markets

There is evidence of growing consumer interest in purchasing locally produced farm and forest products. The recent rise of small-scale Community Supported Agriculture (aka CSA's) farms surrounding urban areas, for example, provides testimony to the fact that consumers are increasingly interested in knowing where their food comes from and supporting a small-scale industry that reflects their values and sense of rural aesthetic. Combined with a brand label that reflects the quality and character of the products a cooperative produces, targeting local consumers can help a cooperative capitalize on the segment of consumers who feel investing locally supports the community and environment they live in.

An example of growing consumer interest in locally produced wood products is the rise in LEED certified buildings throughout the U.S. LEED (Leaders in Energy and Environmental Design) is a certification system developed by the U.S. Green Building Council to certify new construction that meets energy efficient and environmentally sound building criteria. Additional points are given to buildings that use locally produced materials. Since 2001, over 60 LEED certified projects have been constructed in Washington State alone (USGBC 2004). By contracting with future LEED projects, a small cooperative could establish itself as a consistent supplier of locally produced value-added wood products.

Gaining access to local markets for both unprocessed timber and value-added wood products presents multiple benefits for a small forest landowner cooperative. Selling to

local markets reduces transportation costs, allows processors and manufacturers to obtain wood products of higher specificity and can establish a cooperative as the sole source of specialty wood products. Vermont Family Forests presents an excellent example of the success a small cooperative can have in establishing linkages with local markets. By targeting high-end markets such as private schools, local contractors and retail consumers who are interested in purchasing locally produced and sustainably harvested wood products, VFF has been able to receive a price premium for its products. VFF is also establishing itself as a reliable source for a wide range of specialty grades of lumber.

Log Sort Yard

Another opportunity for gaining market leverage in local log markets is for a cooperative to manage its own log sort yard. By pooling timber harvests from its member's lands, the Western Upper Peninsula Forest Improvement District has been able to obtain 15% greater returns on the logs it sells by auctioning larger volumes of specialty grades. This relatively low cost approach to marketing logs provides an opportunity for many small forest landowners to band together and effectively bargain with local and regional log markets. Other benefits of sorting logs may include the following:

- Higher prices and less fluctuation in prices for log sales can be generated through a strategically positioned log sort and sales yard
- The desired log mix (species, grade, and length) that will best meet processing needs can be supplied to individual wood-using businesses, instead of the broad mix of logs typically supplied from a timber sale
- Specialty and character wood logs could be sold when markets exist
- The small timber producer could sell small quantities, regardless of grade
- The small wood-using business could purchase small quantities, regardless of grade
- Log inventory control and fiscal accounting of available log resource would be improved (Dramm)

Managing a log sort yard is not a simple process, nor necessarily a low-cost option. A yard manager and log broker must be hired to manage the yard and source markets for logs. Additionally, the property for the sort yard must either be purchased or leased. To make a sort yard an economically viable option, the additional price premium gained by carefully sorting logs and selling to specific markets must provide enough return to both cover the operating costs and pay landowners a nominal increase over the price they would otherwise receive selling their logs through conventional means. By some estimates, a sort yard can only be viable if it can gain a 15% – 25% increase in price value. For a discussion on how a log sort yard has worked for a landowner cooperative, please see the summary of the Western Upper Peninsula Forest Improvement District.

Consumer Awareness Campaign

Because of its proximity to both Portland and Seattle, Lewis County also has access to large urban consumer populations. A focused consumer awareness campaign to either population center could provoke a surge of interest in purchasing locally produced wood products. A study conducted by the Oregon Forest Resources Institute revealed that 75% of Oregonians prefer to purchase Oregon-grown wood products, when given the choice (OFRI 2002). Sustainable Northwest's Healthy Forests, Healthy Communities Partnership is an example of a marketing campaign that is focused on promoting locally produced and sustainably harvested wood products. The Partnership currently has over 50 members including landowners, manufacturers and retail businesses. HFHC travels to wood trade shows around the Northwest promoting products produced from its members including: solid wood flooring, rustic furniture, home furnishings and building materials (HFHC 2004).

Character Wood

The ability of landowners to gain value from unusually shaped wood or "character wood" as well as under-valued species may gain them additional economic value from their forests that otherwise will have gone unutilized. Jim Berkemier's ability to take random branches from the forest floor and turn them into $60 wooden pens shows the extreme opportunities that exist to render high values from ones forest if creativity is exercised. The Vermont Sustainable Jobs Fund has created a program to support business enterprises that find creative uses for trees with "defect" (VSJF) that have little to no value in conventional markets. High-value rustic furniture is being produced from this character wood providing the potential for higher returns for landowners. The recently incorporated Woodlands Cooperative in Minnesota has developed a Collaborative Character Wood Processing and Marketing Project to investigate the potential for maximizing the value of low-value trees from its member's forestlands (Nadeau). By finding uses for suppressed and defected trees that are harvested during the course of improving high-graded timber stands, landowners can realize values from their forests prior to harvesting commercial grade timber.

Ecosystem Services

There is an emerging recognition of the value of ecosystem services forestlands provide. Such public benefits as clean air, clean water, fish and wildlife habitat, biodiversity and carbon sequestration is no longer being taken for granted as bottled water, air purifiers, zoos and sunburns gain in popularity. Although increasing regulations on forest management signify that our society is interested in protecting these public values, the public's willingness to provide financial support is slow to catch up. Never-the-less, there have been recent increases in federal spending for some cost-share programs as the Environmental Quality Incentives Program and the Wildlife Habitat Incentives Program that provide financial assistance to landowners for improving water quality and wildlife habitat.

A serious undertaking to quantify the public values forestlands provide may shine a brighter light on the need to compensate landowners for these values in an effort to keep forestlands on the landscape. In order to compete with rising real estate prices, the very ecosystem functions that are immediately lost when forestland is developed must be

given a commensurate value if private forestlands are to be conserved. The concept of a carbon credit exchange system that compensates landowners for extending the rotation age of their trees or reforesting unforested land, for instance, is one of the first steps towards institutionalizing a compensation system based on a specific ecosystem function performed by forests: sequestering atmospheric carbon. The city of New York recently developed a water quality conservation plan for its entire forested watershed after a comprehensive study showed that conserving the forest would be a less expensive method of maintaining a clean drinking water source than installing a multi-billion dollar water filtration system. If the fiscal value of these services can be quantified and allocated, future ecosystem service programs may compensate landowners for providing wildlife habitat, producing oxygen, capturing storm water, along with the other contributions to public values sustainably managed forest provide.

Other potential local markets include:

- Building contractors
- Hardware and lumber stores
- Log home construction companies
- High school wood shops
- Cabinet makers
- Timberframers
- Boat builders
- Historic home renovators
- Craftsman and artisans

Certification

Note: for additional discussions on how certification has worked for various cooperatives across the United States, please read the section titled Forestry Cooperative Tours.

Certifying a forest as well managed has been practiced in the United States since 1941 when the American Tree Farm System was first created (Rickenbach 2000). Forest certification typically requires an independent third-party assessment that verifies forest landowners are managing their lands to certain environmental standards. The two primary benefits of becoming certified are access to markets for sustainably produced forest products and public recognition of forest stewardship. The drawbacks to these programs often are complex management criteria and costly certification fees. The Family Forest Foundation examined three primary certification schemes available to family forest landowners in the United States: The American Tree Farm System, the Forest Stewardship Council (or Smartwood), and the Sustainable Forestry Initiative.

Forest certification has become an increasingly controversial topic. Of paramount concern to small forest landowners in the Pacific Northwest have been the additional layer of "regulations" that each certification system perceivably imposes and the attendant cost and complexity of becoming certified. In a region of the United States were state forest management regulations play a significant role in the governance of how private forestlands are managed to protect public resources, the need for additional

certification to ensure environmental and cultural resources are being protected seems redundant to many landowners. The annual cost of maintaining a certified status has also not yet proven to provide any additional financial returns for landowners as the hope of premium prices paid for forest products sold under a certified label have not yet been realized for most landowners.

The American Tree Farm System is specifically a certification program for family forest landowners. The Forest Stewardship Council provides a third party certification assessment for both industrial and non-industrial private forest landowners as well as publicly owned lands. The Sustainable Forestry Initiative is primarily a certification system for industrial forest landowners.

The American Tree Farm System (ATFS) is by far the most widely recognized certification program in the United States as it has been in existence since the 1940's and has more than 65,000 private forest landowners in its membership. The ATFS does not require an annual membership, and the five-year audits required for maintaining certification status are provided free of charge by local state and private forester who volunteer their time to the program. Membership to the organization requires a detailed forest management plan that addresses how landowners will protect cultural resources, wildlife habitat and other environmental qualities of their forests. The stewardship plan also details the silvicultural practices the landowner anticipates implementing. As of yet, ATFS certified forest products do not receive any market recognition or price premium.

In North America nearly 14 million acres of forestland is currently certified under the Forest Stewardship Council (FSC). FSC was founded in 1993 by representatives from environmental and conservation groups, the timber industry, the forestry profession, indigenous peoples' organizations, community forestry groups and forest product certification organizations from 25 countries. Membership to the organization requires a detailed forest management plan that adheres to specific principles and standards set forth by FSC. FSC goes beyond the ATFS in providing specific guidance on harvesting thresholds in riparian areas, size of regeneration harvests, recommended retention volumes and forest monitoring. The FSC label is beginning to develop market recognition and FSC products can be found in Home Depot, Lowe's, Lumberman's and other major retailers of wood products.

The following summaries of each certification system have been provided with permission by Metafore via their website at: http://www.certifiedwood.org.

American Tree Farm System

Background

The American Tree Farm System (ATFS) is the oldest voluntary, third party forest management verification process in the United States. The system was established in 1941 in response to concerns that America's private forests

were being cut at unsustainable rates without reforestation. ATFS takes a three step approach to promoting sustainable forest management– outreach, education, and certification.

ATFS focuses on certifying the forestry practices of non-industrial private landowners in the U.S. Although it is a very diverse population, non-industrial private forest landowners are defined as those who own between 10 and 10,000 contiguous acres of forestland that is not associated with a forest products manufacturing facility.

In an effort to keep pace with the growing awareness over certification, ATFS hired Pricewaterhouse Coopers to conduct a management review of the certification process at the national, state, and field levels. As a result of this review, ATFS updated its standards and guidelines in December 2002. The new requirements for ATFS certification will be implemented in 2004.

Governance

The American Forest Foundation (AFF) has oversight for the ATFS. The AFF is a nonprofit education and conservation organization that was established in 1982. Their mission is to support the long term health of privately owned forests and promote environmental education programs on forestry. The AFF is supported by individual contributions and by grants from foundations, government agencies and corporations. In addition to the ATFS, the AFF sponsors an education program–Project Learning Tree.

The AFF establishes the standards of the ATFS. The AFF consists of a Board of Trustees, a Tree Farm Operating Committee, Education and Outreach Committee, National Public Affairs Committee, Executive Committee, and a staff of 14, seven of which work on ATFS activities. The Operating Committee governs ATFS. The committee is comprised of National and Outstanding Tree Farmers of the Year and representatives from forestry associations, state foresters, forest industry, co-sponsoring associations, and state committee volunteers. Committee members, elected to three year terms, help determine the strategic direction and initiatives of ATFS.

Technical Aspects

The ATFS consists of nine standards, 15 performance measures, and 21 indicators. The standards address commitments to AFF's Standards of Sustainability, legal compliance, long term management planning, environmental, aesthetic, and special sites issues. Additionally, compliance with the ATFS requires that landowners use an accredited Tree Farm Inspector to inspect the operations. The ATFS has established minimum education and experience requirements for certifying foresters and forest technicians and it has developed a national standardized training curriculum for its inspectors.

If the property meets AFF's standards and guidelines for forest sustainability, the landowner receives a certificate and the recognizable diamond shaped Tree Farm sign. A

landowner's property is re-inspected every five years to maintain Tree Farm certification status. There is no charge to the landowner for the inspection.

ATFS on the Ground

There are 65,549 landowners who are currently certified under ATFS. Although the acreage of individual holdings varies substantially, the current list of certified tree farmers owns 26 million acres in 48 states. The majority of landowners certified under ATFS own less than 1,000 contiguous acres. Further, the AFF has a volunteer network of 7,000 qualified tree farm inspectors.

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Forest Stewardship Council

Background

The Forest Stewardship Council (FSC) is an international non-profit organization that offers forest certification on an international basis. FSC was founded in 1993 by representatives from environmental and conservation groups, the timber industry, the forestry profession, indigenous peoples' organizations, community forestry groups and forest product certification organizations from 25 countries.

Although it is international in scope, FSC also supports the development of national and regional standards that are consistent with the international values and requirements adopted by the scheme. FSC has developed guidelines for developing regional certification standards to guide working groups in this process. These standards are developed by national groups (which are active in 40 countries) and regional working groups, which work to achieve consensus amongst the different stakeholders involved in the standards development process.

In addition to standards development, the national groups are also responsible for providing public information, offering a national dispute resolution mechanism, and

monitoring certification organizations to ensure compliance with FSC requirements. The U.S. working group was established in 1995, while the Canadian group was created in 1996.

Governance

FSC is a membership organization with nearly 600 members from over 40 countries. Membership is open to organizations and individuals representing social, economic and environmental interests. Membership voting is structured to provide equal balance between these three groups.

FSC International staff is in charge of operating the program on a day-to-day basis from the head office in Bonn, Germany. The organization is controlled by an elected Board, which consists of people from industry, conservation groups, indigenous people's representatives and others. The membership elects the FSC Board of Directors - nine individuals representing a balance of social, environmental and economic interests.

Technical Aspects

FSC has developed a set of global Principles and Criteria for forest management. There are 10 Principles and 57 Criteria that address legal aspects, indigenous rights, labor rights, multiple benefits, and environmental impacts surrounding forest management. Although the Principles and Criteria are applicable to all forest ecological types throughout the world, FSC encourages national working groups to adapt these Principles and Criteria to local ecological, economic and social conditions to create regional or national standards.

The accreditation process is based on FSC developed procedures and standards to evaluate whether certification bodies can provide an independent and competent evaluation service. Additionally, FSC determines which organizations qualify as accredited auditors under the scheme. FSC accredited certification bodies are required to evaluate all forests aiming for certification according to the FSC Principles and Criteria for Forest Stewardship.

The FSC certification bodies can operate internationally and carry out evaluations in any forest type. Certified entities must undergo a full evaluation to renew their certificates every five years. Further, certified operations are monitored on an annual basis, to ensure they continue to comply with the Principles and Criteria. The performance of the certification bodies is closely monitored by FSC.

Products originating from forests certified by FSC-accredited certification bodies are eligible to carry the FSC-logo, if the chain-of-custody (tracking of the timber from the forest to the shop) has been checked. The FSC has a single label. In addition, to 100 percent raw material certified products, the FSC has a percentage based claims labeling policy. This policy has the following provisions:

1. solid wood products or product lines with at least 70 percent of the raw material by volume is FSC certified; and
2. chip and fiber products where at least 17.5 percent of the total fiber of the product by weight and 30 percent of total virgin fiber by weight is FSC certified.

FSC on the Ground

FSC is a global forest certification scheme. FSC accredited certifiers have certified 580 Forest management companies, who between them manage 103,424,009 acres of forests in 59 countries around the world. These forest management certificates cover temperate, boreal and tropical forests, publicly and privately owned land, and natural and plantation forests. Of these, 115 forest management companies are in the USA and Canada, covering a total of 19,370,263 acres. FSC accredited certifiers have certified 2928 companies for Chain of Custody enabling them to manufacture or distribute FSC certified wood products. Of these 506 Chain of Custody certificates have been awarded to US and Canadian companies handling certified products.

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Sustainable Forestry Initiative

Background

In 1994, the American Forest and Paper Association (AF&PA) developed the Sustainable Forestry Initiative

(SFI) program to document their member's commitment in the United States and Canada to a high level of sustainable forestry. There were two key events that inspired the development of the SFI Principles and Implementation Guidelines:

- *The 1987 Bruntlund Commission Report*, "Our Common Future," which set a vision for sustainable development; and
- *The 1992 Earth Summit*, which raised awareness on the importance of practicing sustainable forestry.

The SFI program was established by the AF&PA Board of Directors in October, 1994. 1995 was the implementation year and in 1996, adherence to the SFI program became a condition of membership for AF&PA members. The original set of guidelines was modified in 1998 with the creation of an industry standard. Later in the same year, the program instituted a set of voluntary verification options that allowed program participants to declare their conformance with the standard. The most recent review of the standards took place in 2001 and went into effect in 2002. The next scheduled review of the SFI program will be 2004 with any new implementation measures taking effect in 2005.

Governance

In July of 2000, the Sustainable Forestry Board (SFB) was created to manage the standard, verification procedures, dispute resolution and program quality control. In 2001, the SFB become an independent non-profit entity with full management authority. The SFB is a 15-person board with members consisting of natural resource professionals, conservation organizations, and the forestry industry. The External Review Panel continues to serve in an advisory capacity to AF&PA and the SFB and is responsible for ensuring technical and scientific accuracy of the program. AF&PA remains responsible for administering the SFI program, including communications, licensing, labeling and reporting.

Technical Aspects

The SFI Standard (SFIS) spells out the requirements of compliance with the program. The SFIS is based on six principles that address economic, environmental, cultural and legal issues, in addition to a commitment to continuously improve sustainable forest management. The SFIS contains 11 objectives and 36 performance measures covering sustainable forest management, procurement of wood and fiber, public reporting, and continuous improvement. Within these objectives are performance measures, core indictors and secondary indicators. Compliance with the 117 core indicators is integral for conforming to the SFIS.

The accreditation system used by the SFI program complies with the requirements of the American National Standards Institute and the Registrar Accreditation Board. Verification of compliance with SFI program requirements may be first, second or third party audited. However, third party auditing is required to ensure compliance with the

SFIS. Initial recertification must take place within three years and subsequent reviews must occur at least every 5 years thereafter. Periodic surveillance audits are required for program participants that use the SFI label.

The SFI program also includes four different product labels. One label is for primary producers (SFI Certified Participant) that procure raw material, while the other three are for operations that purchase processed products (such as secondary manufacturers, publishers and retailers). In order to use the SFI label, the entire supply chain must undergo a supply chain audit in order to demonstrate that it conforms to the SFI standard.

SFI on the Ground

The SFI program has approximately 210 participants; 130 are AF&PA members for which participation is mandatory, while there are 80 additional organizations that are licensed under the program, but are not members of AF&PA. These 80 organizations consist of small forest products companies, state and county land management authorities, conservation organizations, and universities.

As of July 31, 2003, 136 million acres were enrolled in the SFI program in Canada and the United States. Of this amount, 96 million acres have been third-party certified. For more information on the recent progress of the SFI program download the 2003 Annual Progress Report.

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Conclusion

The economic benefits of forest certification for Pacific Northwest forest landowners have yet to be clearly defined. One of the founding premises of forest certification was that certified landowners would receive a premium price for wood products harvested from their lands. Although certified forest products typically receive a premium price on the retail end, this value is rarely transmitted back to the landowner. Therefore, the additional costs associated with becoming certified cannot yet be justified in economic terms. In interviews with forestry cooperatives in the Midwest and New England, certification did not play a significant role in providing either a higher return or greater

market recognition. The most significant benefit expressed by coops that utilized a certification scheme was that it provided a framework for developing forest stewardship plans where no other guidelines were available.

So the question becomes, what short or long-term benefits may be gained by becoming certified? There is evidence of increasing consumer interest in commodities that are locally produced in an environmentally sensitive manner. The growth of the organic foods industry and its attendant small-scale farms is a clear testimony that consumers are willing to pay more for products that are produced according to specific value systems. The U.S. organic market is projected to reach a value of $30.7 billion by 2007, with a five-year compound annual growth rate of 21.4 percent between 2002 and 2007, compared to a 21.2 percent rate between 1997 and 2002 (Organic Trade Association 2004). This in spite of the fact that consumers must often pay an average of 10-20% more for organically produced food products that conventionally produced food products.

Arguably the corollary in the wood industry to organically labeled foods is certified forest products. Over the past 10 years, new markets have begun to emerge for forest products that are certified as coming from sustainably managed forests. A World Wildlife Fund study found that consumers say they are willing to pay 13.6% more on average for wood products originating from sustainable sources (Read 1991). Another study found that 19% of educated consumers with relatively high incomes claim they are willing to pay more for certified wood products (Winterhalter and Cassens 1993). Additionally, a new league of buildings is being constructed according to high standards of energy efficiency and environmental design. The United States Green Building Council has developed a rating system for new construction projects called Leadership in Energy and Environmental Design (LEED). LEED certified buildings gain points for utilizing both local materials and FSC certified forest products. LEED certified projects account for 3% of all commercial construction in the United States and 22% of all construction in the public sector (USGBC 2004).

Perhaps the most compelling reason for family forest landowners to consider certification is to be positioned to take advantage of any future growth in the certified wood marketplace. Given that industrial forest landowners are more inclined to be SFI certified, family forest landowners may be able to use the FSC label as a means to differentiate their products in the marketplace. Analysis of the management objectives of most family forestlands indicates that they already apply high environmental standards to the management of their forests. Therefore, impacts or changes to management prescriptions may be minimal, with the transition to certification resulting in no loss of revenue in terms of harvestable timber.

In order for certification to be a practical consideration for family forest landowners it must be relatively inexpensive and uncomplicated. The American Tree Farm System does not charge a membership fee once a stewardship plan has been developed and the five-year audits are also provided for free. The Forest Stewardship Council is developing new programs to help reduce the cost and complexity for family forest landowners. Landowners can now become certified by a Resource Manager, a private consulting

forester or non-profit organization that provides certification to a large number of individual landowners and spreads the cost of certification amongst each landowner (Pranger 2003). FSC is also developing a new set of standards designed specifically for Small and Low-Intensity Managed ForestS (SLIMFS). According to FSC International, these standards are meant to alleviate the cost and complexity of FSC certification and make the certification process more available to small forest landowners (FSC USA 2004).

For wood products from family forestlands to reach consumers who are interested in locally produced, sustainably harvested products, some form of brand or certification may be necessary. The Family Forest Foundation therefore recommends that landowners become certified under the American Tree Farm System due to its availability and history of serving small forest landowners, and monitor the Forest Stewardship Council for improvements to its programs for small forest landowners and the changes in markets for FSC certified forest products. Until the cost and complexity of certification under FSC are alleviated, the Foundation does not recommend FSC certification for small forest landowners.

Funding and technical assistance programs

The Family Forest Foundation has engaged in an exhaustive research effort to identify all sources of financial and technical assistance available for forestry co-ops. All information gathered to date has been published on the Foundation's website (http://www.familyforestfoundation.org/).

Publications

A Planning Guide for Small and Medium Size Wood Products Companies: The Keys to Success.
Author: Jeff Howe and Steve Bratkovich, USDA Forest Service, NE Area
Source: http://www. fpl.fs.fed.us/documnts/misc/natp0995.pdf

Balancing Ecology and Economics: A Start-up guide for Forest Owner Cooperation
Author: Cooperative Development Services, University of Wisconsin Center for Cooperatives, Community Forestry Resource Center, Cooperative Development Institute.
Source: http:www.forestrycenter.org/manual

The Big Log Project
Author: Oregon State University Extension Forestry
Source: http://www.oswa.org/BigLogsFinal.pdf

Building Better Rural Places: Federal programs for sustainable agriculture, forestry, conservation and community development
Author: United States Department of Agriculture
Source: http://attra.ncat.org/guide/

Collaborative Character Wood Production and Marketing Project.
Author: Cooperative Development Services
Source: http://www.mda.state.mn.us/esap/greenbook2003/altcrops2.pdf

Comparative Analysis of the Forest Stewardship Council and Sustainable Forestry Initiative Certification Programs
Author: Meridian Institute
Source: http://www.greenbiz.com/news/fatearth/tools_template.cfm?LinkAdvID=20919

Coops 101: An Introduction to Cooperatives
Author: United States Department of Agriculture
Source: http://www.rurdev.usda.gov/rbs/pub/cir55/cir55rpt.htm

Creating Closed Loop Economies: Transitioning to a "Carbohydrate Economy" By Turning Agricultural and Forestry Waste Into Industrial Products
Author: The Institute for Local Self-Reliance
Source: http://cwch.uoregon.edu/ReportsFolder/idaho.htm

Drying Hardwood Lumber
Author: USDA Forest Service
Source: http://www.fpl.fs.fed.us/documnts/FPLGTR/fplgtr118.pdf

Forest Certification in North America
Author: Rick Fletcher
Source: http://eesc.orst.edu/agcomwebfile/edmat/EC1518.pdf

Forest Products Laboratory Research on Small Diameter Wood
Author: USDA Forest Service Forest Products Laboratory
Source: http://www.fpl.fs.fed.us/documnts/FPLGTR/fplgtr110.pdf

Full Vigor Forestry: Sustainable Forest Management from the Forest Owner's Point of View
Author: Jim Berkemier
Source: www.timbergreenforestry.com

How to Start a Cooperative
Author: USDA Rural Business/Cooperative Service
Source: http://www.rurdev.usda.gov/rbs/pub/newpub.htm

The Illusion of Preservation
Author: Harvard University
Source:
http://harvardforest.fas.harvard.edu/publications/pdfs/Berlik_JBiogeography_2002.pdf

Innovative State Policy Options to Promote Rural Economic Development
Author: National Governor's Association for Best Practices
Source:
http://www.nga.org/center/divisions/1,1188,T_CEN_ESS%5EC_ISSUE_BRIEF%5ED_5017,00.html

An Introduction to Forest Certification
Author: Mark Rickenbach, Oregon State University Extension Service
Source: http://faculty.washington.edu/bare/EC1518.pdf

Log and lumber grades as indicators of wood quality in 20- to 100-year-old Douglas-fir trees from thinned and unthinned stands.
Author: USDA Forest Service Pacific Northwest Research Station
Source: http://www.srs.fs.usda.gov/pubs/viewpub.jsp?index=2921

A Market Based Strategy for Rural Development In Northwest Louisiana: Maximizing Opportunities Through Value-Added Forest Products Industries
Author: Louisiana State University
Source: http://www.rnr.lsu.edu/lfpdc/publication/reports/rpt48.pdf

Marketing for Wood Products Companies
Author: Virginia Cooperative Extension
Source: http://www.ext.vt.edu/pubs/forestry/420-145/420-145.html

Members Make Co-ops Work
Author: USDA Rural Business/Cooperative Service
Source: http://www.rurdev.usda.gov/rbs/pub/newpub.htm

Non-timber Forest Products in the United States
This site contains conservation and development information on commercial, recreational, and subsistence extraction of non-timber forest products (NTFP). A diverse range of areas are covered, including cultural, ecological, economic, geographic, and political.
www.ifcae.org/ntfp

Review of Log Sort Yards
Author: USDA Forest Service Forest Products Laboratory
Source: http://www.fpl.fs.fed.us/documnts/fplgtr/fplgtr132.pdf

Sustainable Forestry Cooperatives in the Midwest
Author: University of Wisconsin Center for Cooperatives
Source: http://www.wisc.edu/uwcc/info/uwcc_bulletins/bulletin_07_02.pdf

Sustaining Family Forests in Rural Landscapes: Rationale, Challenges, and an Illustration from Oregon, USA
Author: John C. Bliss
Source: http://research.yale.edu/gisf/assets/pdf/ppf/lit_review_10_03.pdf

Technology Roadmap: Lumber and Value-added Wood Products
Author: Forintek Canada Corp
Source: http://strategis.ic.gc.ca/epic/internet/infi-if.nsf/en/fb01315e.html

Tool Kit for Forest Owner Cooperatives
Author: Chuck Ouimette, Cooperative Development Services
Source: http://www.cdsus.coop/

What are Cooperatives?
Author: USDA Rural Business/Cooperative Service
Source: http://www.rurdev.usda.gov/rbs/pub/newpub.htm

Why Invest in Rural America?
Author: Ken Stauber
Source: http://www.kc.frb.org/PUBLICAT/ECONREV/PDF/2q01stau.pdf

Government Financial Assistance Programs

Environmental Protection Agency
Small Business Innovation Research (SBIR) Program
The Environmental Protection Agency (EPA) is one of 10 federal agencies that participate in the SBIR Program established by the Small Business Innovation Development Act of 1982. The purpose of this Act was to strengthen the role of small businesses in federally funded R&D and help develop a stronger national base for technical innovation. A small business is defined as a for profit organization with no more than 500 employees. In addition, the small business must be independently owned and operated, at least 51 percent owned by U.S. citizens or lawfully admitted resident aliens, not dominant in the field of operation in which it is proposing, and have its principal place of business in the United States. Joint ventures and limited partnerships are eligible for SBIR awards, provided the entity created qualifies as a small business.
http://www.epa.gov/ncer/sbir

Federal Funding Sources for Rural Areas: Fiscal Year 2003
A reference guide for federal grants compiled by the USDA's Rural Information Center.
http://www.nal.usda.gov/ric/ricpubs/funding/federalfund/ff.html

National Cooperative Bank Development Corporation
NCB Development Corporation (NCBDC) is a non-profit organization creatively invests in communities and community-building organizations that have limited access to traditional capital.
http://www.ncbdc.org/ncbdc/contents.nsf/index.htm

United States Department of Agriculture
Business and Industry Loans
The purpose of the Business and Industry loan program is to improve, develop or finance business, industry and employment and improve the economic and environmental climate in rural communities by guaranteeing quality loans which will provide lasting community benefits.
http://www.rurdev.usda.gov/wa/bil.htm

United States Department of Agriculture
Small Business Innovation Research Program
USDA will support high-quality research or research and development proposals containing advanced concepts related to important scientific problems and opportunities that could lead to significant public benefit if the research is successful. Objectives of the Small Business Innovation Research program include stimulating technological innovation in the private sector, strengthening the role of small businesses in meeting Federal research and development needs, increasing private sector commercialization of innovations derived from USDA-supported research and development efforts, and fostering and encouraging participation by women-owned and socially and economically disadvantaged small business firms in technological innovation.
http://www.reeusda.gov/sbir/GeneralProgramInformation.htm

United States Department of Agriculture
Rural Business Enterprise Grant
Grants made by USDA Rural Development to public bodies, not for profit entities or Indian tribes to support the development of private business enterprises. Limited to communities of 50,000 population or less.
http://www.rurdev.usda.gov/wa/rbeg.htm

United States Department of Agriculture
Rural Business Opportunity Grant
Grants to public bodies, nonprofit corporations, Indian tribes, and cooperatives (meeting certain criteria), which will be used to assist in the economic development of rural areas.
http://www.rurdev.usda.gov/wa/rbog.htm

United States Department of Agriculture
Rural Cooperative Development Grant
Grants made by USDA Rural Development to nonprofit corporations and institutions of higher education for the purpose of establishing and operating centers for rural cooperative development. Grant will be used to facilitate the creation or retention of jobs in rural areas through the development of new rural cooperatives, value-added processing and rural businesses.
http://www.rurdev.usda.gov/wa/rcdg.htm

Government Technical Assistance Programs

Appropriate Technology Transfer to Rural Areas (ATTRA)
ATTRA National Sustainable Agriculture Information Service, funded by the US Department of Agriculture, is managed by the National Center for Appropriate Technology. It provides information and other technical assistance to farmers, ranchers, Extension agents, educators, and others involved in sustainable agriculture in the United States.
http://attra.ncat.org/

Department of Community Trade and Economic Development
The Economic Development Division delivers a range of services from assisting with complex permit processes to infrastructure and business financing to marketing the state as a desirable place to live, work or visit. Its clients include local municipalities looking for assistance with planning and predevelopment to economic development organizations and businesses needing help on business retention and expansion efforts. The division takes a partnership approach to service delivery working closely with the local economic development organizations and local, state and federal agencies.
http://www.cted.wa.gov/

Rural Technology Initiative
RTI (Rural Technology Initiative) was established in January 2000 by a federal grant as a pilot project to accelerate the implementation of new technologies in rural forest resource-based communities. Increasing complexity from changing environmental regulations, such as the new Forest and Fish Agreement in Washington State, and the recognition that new research findings were well ahead of implementation suggested the need for more rapid technology transfer.
www.ruraltech.org

Small Business Administration
The SBA mission is to maintain and strengthen the nation''s economy by aiding, counseling, assisting and protecting the interests of small businesses and by helping families and businesses recover from national disasters.
http://www.sba.gov/

USDA Rural Development
Technical Assistance for Cooperative Development
Assistance for people interested in forming new cooperatives or existing cooperatives facing specific problems or challenges**.**
http://www.rurdev.usda.gov/wa/tacd.htm

Non-government Financial Assistance Program

Accion Micro-lending
The mission of ACCION International is to give people the tools they need to work their way out of poverty. By providing ""micro"" loans and business training to poor women and men who start their own businesses, ACCION''s partner lending organizations help people work their own way up the economic ladder, with dignity and pride. With capital, people can grow their own businesses.
http://www.accion.org/about_our_mission.asp

Cascadia Revolving Fund
Cascadia provides financing and business assistance to underserved entrepreneurs, small businesses, and community-building organizations.
http://www.cascadiafund.org/

Cooperative Development Foundation
CDF brings together the funds and partners to incubate and replicate innovative programs through new and existing cooperative enterprise.
http://www.coopdevelopment.org/funds.html

Healthy Forests, Healthy Communities Initiative
Small Grants Program
The Small Grants Fund Program provides HFHC nonprofit and business members the opportunity to implement projects related to the Vision and Values of the Partnership. Grants are awarded three times a year to support innovative strategies and activities in

three focus areas: Business Development; Community Collaboration, Education and Outreach; and Forest Ecosystem Management.
http://www.hfhcp.org/

Program Related Investments
In 1969, the U.S. Internal Revenue Code was amended to allow private grant-making foundations to make loans and/or higher risk investments that were aligned with the philanthropic mission of the foundation. The great majority of PRI's have been used in urban community development efforts chiefly focused on the production of low-income housing. Recently, a number of private foundations have expanded the use of PRI's to help achieve land conservation results in various parts of the U.S. The David and Lucille Packard Foundation, the MacArthur Foundation, the KHK Foundation, the Ford Foundation and the Jessie Smith Noyes Foundation have all provided loans (at below market rates) to non-profit conservation organizations for a wide variety of land conservation projects.

Shore Bank Pacific
ShoreBank Pacific, a Washington State chartered, FDIC insured bank, is the first commercial bank in the United States with a commitment to environmentally sustainable community development. ShoreBank Pacific was formed in 1997 as a joint project of Shorebank Corp., Chicago (the nation''s first community development bank) and Ecotrust (an environmental non-profit). Through lending programs, Shorbank Pacific supports individual and community efforts to bring together conservation and economic development. With each loan, they provide information on conservation improvements that can increase the value of the borrower''s business.
http://www.eco-bank.com/

Non-government Technical Assistance Programs

Agricultural Marketing Resource Center
The Agricultural Marketing Resource Center (AgMRC) brings together experts from three of the nation's leading agricultural universities - Iowa State University, Kansas State University and the University of California - into a dynamic, electronically based center to create and present information about value-added agriculture. The center draws on the abilities, skills and knowledge of leading economists, business strategists and outreach specialists to provide reliable information needed by independent producers to achieve success and profitability in value-added agriculture. Partial support for the center derives from the U.S. Department of Agriculture, Rural Development, Rural Business Cooperative Service.
http://www.agmrc.org/

Association for Enterprise Opportunity
The Association for Enterprise Opportunity is a national association of organizations committed to microenterprise development. AEO provides its members with a forum, information, and a voice to promote enterprise opportunity for people and communities with limited access to economic resources.

http://www.microenterpriseworks.org/

Center for the Study of Rural America
http://www.kc.frb.org/RuralCenter/RuralMain.htm

Certified Forest Products Council
An independent, not-for-profit, voluntary initiative committed to promoting responsible forest products buying practices throughout North America.
www.certifiedwood.org

Community Forestry Resource Center
CFRC has been working in Wisconsin and Minnesota since 1998 in the development of sustainable forestry cooperatives and associations. The CFRC website brings together in one place resources and information about sustainable forestry, certification, and cooperative solutions for forestland management.
http://www.forestrycenter.org/

Cooperative Development Services
CDS is a nonprofit organization created and governed by the cooperative community of the Upper Midwest for the purpose of developing cooperative businesses in all sectors of the economy.
http://www.cdsus.coop/

E-Commerce Learning Center for Farm Cooperatives
Dedicated to helping your co-op reach directly to consumers in markets all over the globe, the Learning Center helps cooperatives plan and build a successful online business. The E-Commerce Timeline Learning Model takes cooperatives through every step of the process from Planning to Web Development and Product Design to Marketing. The site includes subject overviews, Frequently Asked Questions (FAQ), extensive links to online Resources and more.
http://www.e-cooperatives.com/

Healthy Forests, Healthy Communities Partnership
The Healthy Forests, Healthy Communities Partnership (HFHC) is a collaborative network dedicated to building rural economies based on forest restoration and ecosystem management, and to creating markets for the 'by-products' of these activities. HFHC business members convert these 'byproducts' – *small diameter suppressed trees and underutilized species* - into quality wood products - *flooring, furniture, crafts, fixtures and others* – creating jobs in the communities adjacent to the forests.
http://www.hfhcp.org/

Leaders in Energy and Environmental Design
The LEED (Leadership in Energy and Environmental Design) Green Building Rating System™ is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Members of the U.S. Green Building Council

representing all segments of the building industry developed LEED and continue to contribute to its evolution.
http://www.usgbc.org/LEED/LEED_main.asp

Northwest Cooperative Development Center
The Northwest Cooperative Development Center (NWCDC) is a nonprofit organization devoted to assisting new and existing cooperative businesses, from daycare centers to credit unions. The Center''s main focus is cooperative education. NWCDC has access to a wide range of information on cooperative ownership and participatory management models throughout the country and the globe. We serve as a clearinghouse for cooperative practices.
http://www.nwcdc.coop/

SmartWood
Initiated in 1989, SmartWood is the oldest and most extensive certification program in the world. SmartWood is a program of the Rainforest Alliance, an international nonprofit environmental group based in New York City. SmartWood''s purpose is to improve the effectiveness of sustainable forestry in conserving bio-diversity and providing equity for local communities, fair treatment to workers, and creating incentives for businesses so that they can benefit economically from responsible forestry practices.
www.smartwood.org

University of Wisconsin Center for Cooperatives
The UWCC conducts extension/outreach and research. Extension/outreach programs are directed at all aspects of cooperative business principles, organizing cooperatives, cooperative financing, cooperative structure, cooperative management, leadership and governance, and related topics for both agricultural and consumer cooperatives. Research topics investigate all types of cooperative issues.
http://www.wisc.edu/uwcc/info/i_pages/resforestry.html#forestry

Conclusion

Considerations for a landowner cooperative in the Pacific Northwest are very different than those in the Midwest or New England. The Pacific Northwest has quite different forest types, different market factors and perhaps most importantly, quite different landowners. The rise in popularity of cooperatives in the Midwest is not so surprising considering the largely Scandinavian population that has a heritage of more socialistic forms of community governance. The independent and pioneering attitudes of landowners in the Northwest could potentially pose a challenge to any association interested in attempting to organize these landowners around a central theme. Beyond these attitudes, however, lie other practical differences. Most significantly, survey results indicate that landowners in Lewis County are, for the most part, quite happy with the services they receive from private consulting foresters and government service foresters. This confidence in professional advice, so lacking amongst Midwest and New England landowners, may minimize the need for a cooperative that is primarily focused on providing forest management services.

Never-the-less 59% of respondents to the landowner survey indicated they were interested in learning more about a forestry cooperative. These landowners represented approximately 25,200 acres of forestland. 41% of respondents indicated they currently would be interested in participating in a forestry cooperative. These landowners represented approximately 16,000 acres of forestland. Of a variety of service areas a cooperative could offer, landowners were most interested in marketing low-value wood. Landowners also expressed significant interest in coordinating timber harvests and sales and collectively marketing their wood products. Of a variety of specific services a cooperative could offer, survey respondents indicated that understanding the state forest practices regulations, acquiring reliable information, estate planning, general training, developing a forest management plan and inventorying their forests were of the greatest interest respectively.

A central theme to each landowner organization the Foundation researched was that they told a story of the wood products, the landowners, their forests and the region they represented. These stories became implicit in the marketing of their products and in the pride the landowners took in working together to better manage their forests. These were stories of legacy, of good land stewardship, of innovation and adaptation to changing markets, and most importantly, of cooperation. These stories also gave the wood products from family forestlands an identity that differentiated them from other commercially produced wood products. This latter fact has become essential for cooperatives that are striving to gain market share for their wood products.

The Family Forest Foundation believes that before it can begin marketing wood products from landowners, however, it must first develop the mechanism to implement long term management plans. It will then begin developing the story that will differentiate family forests from other types of forestlands. For the Foundation, this story revolves around the good stewardship family forest landowners apply to their forestlands. If anything differentiates a family forest from industrial and public forestlands it is the intimate care

and mindfulness towards legacy that these small landowners apply to their management. Business decisions are made during picnics in the woods or around a kitchen table rather than around corporate boardroom tables where net-present-value and return to shareholders dominate the discussion.

Fundamental to sustained forest management is a stewardship plan that guides the long-term management of family forestlands. A scientifically credible stewardship plan provides a metric by which the production and availability of timber, wildlife habitat, clean water and non-timber forest products can be measured and managed. A stewardship plan, when made public, also provides credibility to consumers that the type of management on these small forestlands meets, and more often exceeds, the environmental standards set before industrial and public forestlands.

When asked what the most significant challenges were to the management of their forestlands, respondents to the landowner survey overwhelmingly ranked state and federal regulations as their top concerns. Constantly changing state regulations have been a bane for private forest landowners for years as such changes reduce the certainty that a landowner will be able harvest the trees he plants. Realizing this paramount concern for landowners, the Family Forest Foundation is first dedicating itself to developing a forest management plan that will provide landowners long-term certainty against changes in state and federal regulations.

Formally called the *Family Forest Habitat Conservation Plan* (FFHCP), when complete this plan will serve as a multi-landowner and multi-species conservation plan that will provide family forest landowners with the assurance that they will not be subject to future regulatory uncertainty during the lifetime of the plan. A Habitat Conservation Plan (HCP) is a natural resource management plan developed by a landowner that details how impacts to endangered wildlife habitat will be minimized during the course of harvesting timber. The FFHCP will provide family forests long-term regulatory certainty against changes in state and federal regulations. At the same time, it will provide landowners the incentive to develop long-term management plans that enhance and maintain wildlife habitat. With an HCP, landowners will no longer face the threat of having their ability to harvest timber taken away should an endangered species use habitat created on their property.

The Foundation believes that a credible forest stewardship plan is central to defining the stewardship ethic of family forests and the uniqueness of their management practices relative to other types of forest landowners. With growing consumer interest in sustainably harvested forest products, a stewardship plan provides consumers the assurances they may be seeking that the forest products they purchase have been produced according to sound ecological principles.

Organizing landowners around the FFHCP will lay the groundwork for future market investigation and economic development. Through administration of the FFHCP, the Foundation will assist landowners with inventorying their timber and habitat resources. These inventories will be essential to quantifying the volume of harvestable timber and

other public values family forestlands in Lewis County are capable of providing. Timber inventories will also yield a picture of the potential value-added timber products that can be produced. Data collected on species and grade can quickly be translated to an economic profile of small woodlots.

The majority of services landowners expressed interest in revolved around information sharing (estate planning, forest inventorying, management planning, training, wildlife habitat enhancement, etc.). As a non-profit 501(C) 3 organization, the Foundation is already organized to provide these services without either creating a new organization or changing its corporate tax structure. Further, the spectrum of professional skills represented on the Foundation's board of directors is perfectly suited to provide these services or, at a minimum, oversee the administration of these services. Therefore little change is necessary to carry out the majority of functions landowners expressed interest in a cooperative providing.

Many of these services are also complimentary to the programmatic management planning approach called for with the Family Forest Habitat Conservation Plan. In other words, while the Foundation is assisting landowners with their personalized HCP, concurrent workshops and training programs can be planned to deliver information on wildlife habitat enhancement, understanding state and federal regulations, estate planning, applying for government cost-share programs, managing timber sales, etc.

The Family Forest Foundation plans to research the values of ecosystem services provided by small woodlot owners in Lewis County as a way of quantifying the public values these landowners provide. By assessing the economic value of the clean air, clean water, carbon sequestration, wildlife habitat and other incidental values provided by family forestlands, cost-share mechanisms and other means may be developed to help share the cost of providing these values with the public. Carbon credits are one emerging example of the way the marketplace is beginning to put a value on one particular function of a forest ecosystem. Forest and farm landowners are beginning to receive financial payments for the atmospheric carbon sequestered in their soil or the biomass of their trees when the practices conservation-based management activities. In the future, credits may be provided for the maintenance and production of clean water and other ecosystem services.

In the future, if the Foundation determines that a shift towards marketing timber or value-added forest products is appropriate, a new business structure may be considered at that time. Of keen interest to the Foundation is the Vermont Family Forest model of a partnership between a non-profit foundation that provides educational services and a for-profit LLC that provides marketing services. An LLC provides distinct advantages over a cooperative corporation in that it provides a leaner structure for making quick business decisions. Although more democratically organized, a true cooperative corporation where each member has one vote can present cumbersome management and business planning challenges. Ultimately any future business structure must respond to landowners needs. If the need is purely educational in nature, a 501(C) 3 organization is perfectly suited to provide such services. If landowners are simply interested in obtaining

greater returns for their forest products, any business structure that is capable of providing these returns may satisfy that need.

Ultimately, for the Foundation to achieve its goals, family forest landowners must achieve broad access to markets for the full range of commodities and services they provide. Further investigation into marketing entities that can provide this access will be essential to the conservation of family forests.

Appendix A: Time Analysis for Feasibility Study

Topic of Study	Hours
General Administration	172.5
Landowner Survey	108.5
Research Fundraising	47
Research Certification	25.5
Research Markets	61
Research Business Models	13.5
Attend Conferences	36.5
GIS Analysis	36
Attend Cooperative Tours	418
Write Final Report	52
Board Meetings	217.5
Advisory Council Meetings	142.5
Total	1330.5

Appendix B: Forestry Cooperatives in the United States

The following section provides brief summaries of other forestry cooperatives and similar organizations across the United States that have not already been covered in this document.

Adirondacks Sustainable Forestry Project
The Adirondack Park Sustainable Forestry Project is a program of the Residents' Committee to Protect the Adirondacks that provides Forest Stewardship Council (FSC) sustainable forestry certification, works to organize certified landowners for marketing certified wood, and generally assist landowners with the long-term stewardship of forestlands in the Adirondack Park.
http://www.adirondackresidents.org/forestry.html

Appalachian Sustainable Development
ASD is a not-for-profit organization working in 10 counties of the Appalachian section of Virginia and Tennessee, a region which suffers from double digit unemployment, out migration of young people and chronic environmental problems. Formed in 1995 following a year long community strategic planning process, ASD focuses on developing healthy, diverse and ecologically sound economic opportunities through education and training, and the development of cooperative networks and marketing systems. ASD''s two main programs are in Sustainable Forestry and Wood Products and Sustainable Agriculture.
http://www.appsusdev.org/susfor.html

Artwood
Artwood is a cooperative gallery located in Bellingham, Washington.
http://www.pacificws.com/artwood/

Athol Forestry Cooperative
Athol Forestry is one of 6 group ventures in the Province of Nova Scotia, providing woodlot management and marketing services to private woodlot owners in Western Cumberland County and part of Colchester County.
http://www.atholforestry.com/

Ecotrust
Ecotrust was created in 1991 by a small group of diverse people who sought to bring some of the good ideas emerging around sustainability back to the rain forests of home. We set out to characterize this region and articulate a more enduring strategy for its prosperity. These efforts are predicated on the notion, gaining an ever wider currency, that economic and ecological systems are mutually interdependent. To this relationship Ecotrust and others have sought to add a third "e" - social equity - to ensure that economic development awards benefits to all the region's citizens. Economy, ecology, equity: the triple bottom line.
http://www.ecotrust.org/

Federation of Southern Cooperatives
We strive toward the development of self-supporting communities with programs that increase income and enhance other opportunities; and we strive to assist in land retention and development, especially for African Americans, but essentially for all family farmers.
http://www.federationsoutherncoop.com/

Flora Pacifica
Located on the Oregon Coast just a few miles from the California state line, FLORA PACIFICA has an 11-acre farm growing a wide variety of cut flowers and herbs, grown primarily for our own wreaths and swags. Hydrangeas are their main crop. In addition, FLORA PACIFICA buys special forest products that have been responsibly harvested from the surrounding woodlands, resulting in wonderfully woodsy creations with a fragrance straight from the forest.
http://www.florapacifica.com/

Forest Craft Marketing Cooperative
An artists'' co-operative formed to promote the artisans of the Inland Northwest USA.
http://www.forestcraft.com/

Headwaters Forestry Cooperative
The Headwaters Forestry Coop (HFC) was formed in 1999 by a group of landowners from Todd County, Minnesota. Their goal is to improve forest management and productivity, to restore the ecological harmony of their watershed and to provide incentives for small businesses to thrive in their community. HFC is a landowner controlled cooperative. They are organized to enable landowners to pool their resources, while simultaneously improving the long-term productivity of their lands. Forest certification is one of the tools they employ to reach these goals. Landowner members of HFC are expected to be working toward FSC certification of their lands.
http://www.headwatersforestrycoop.com/home.html

Healthy Forests, Healthy Communities Partnership
The Healthy Forests, Healthy Communities Partnership (HFHC) is a collaborative network dedicated to building rural economies based on forest restoration and ecosystem management, and to creating markets for the 'by-products' of these activities. HFHC business members convert these 'byproducts' – *small diameter suppressed trees and underutilized species* - into quality wood products - *flooring, furniture, crafts, fixtures and others* – creating jobs in the communities adjacent to the forests.
http://www.hfhcp.org/

Hiawatha Sustainable Woods Cooperative
HSWC was incorporated in August of 1998. The co-op began processing operations by salvaging damaged timber using a borrowed sawing site and contracted kiln drying. HSWC purchased the 10-acre site near Cataract in June of 2000. HSWC provides processing, marketing and land management/education services to members. It currently has about 60 members owning just over 6,000 acres of woodlands.
http://my.execpc.com/~tmbrgrn/page106.html

Kickapoo Woods Cooperative
Kickapoo was incorporated in March of 2001 and today has over 35 members. KWC is focusing its development on providing easy access to services for its landowner members seeking to improve their woodlands. Logs coming off the lands in the process will then be sold to appropriate markets, where it will get can get processed further.
http://www.arthurbernstein.com/KWC/

Maine Low-Impact Forestry Project
The Maine Low Impact Forestry Project is a group of Loggers, foresters and woodlot owners interested in developing and promoting the methods and technologies of Low Impact Forestry.The Maine Low Impact Forestry Project is also helping to connect land owners and practitioners of low impact forestry with emerging markets for sustainably harvested forest products
http://www.hcpcme.org/lif/home.html

Next Generation Woods, Incorporated
The mission of Next Generation Woods, Inc. is to produce wood products in the most ecologically respectful manner to preserve and enhance the forests of our next generations. We're basing our corporate strategy on our belief that we didn't simply inherit Nature's resources to use for our immediate needs—we have a responsibility to protect them for future generations.
http://www.nextgenwoods.com/

Northwest Fine Woodworking
Northwest Fine Woodworking is a marketing cooperative dedicated to promoting the finest in craftsmanship, original design, and the magic of real wood.
http://www.nwfinewoodworking.com

North Woods Forestry Cooperative
NFC works with established foresters, loggers and wood manufacturers who live near Aitkin, Minnesota. NFC is developing a sales program to helps landowners find and contract with loggers and other forestry service providers. The Co-op plays a coordinating rather than a direct role. However, where there are gaps in the forest industry of the region not currently being met, the Co-op is seeking to provide those services.
http://www.greatlakescertifiedwood.com/northwoods/

Prairie's Edge Sustainable Woods Cooperative
Formed in January 2001, Prairie'' s Edge joins a string of forestry cooperatives that have sprung up in Wisconsin and Minnesota. Prarie'' s Edge is completely owned and controlled by members. A $100 initial membership fee buys an ownership share in Prairie'' s Edge and helps finance start-up costs. Membership is open to anyone who subscribes to the cooperative'' s goals. Prairie'' s Edge has grown to over 60 members who own over 6,000 acres of woodlands.
http://www.tc.umn.edu/%7Esmit1635/for_coop/pflc_iowa_peswc.htm

Sustainable Woods Cooperative
The Sustainable Woods Cooperative was the first business of its kind in the nation to combine certified sustainable forest management by its members and certified chain of custody sales of wood products from members'' forests through a cooperative ownership structure. SWC consisted of some 154 private landowners in 11 southwestern Wisconsin counties who joined forced to build a sawmill and hardwood manufacturing facility to market certified wood products from their woods.
http://www.sustainablewoods.com/

Upper Michigan Forest Stewards Group
The mission of UMFSG is to help bring the management of non-industrial, private forests (NIPF''s) into harmony with native ecosystems. We believe the relationship between humans and the rest of nature should be a reciprocal, mutually beneficial one. Given our species ecological role as consumers, humans need to harvest timber and other woodland products in order to survive and prosper. Conversely, humans have a critical, creative role to play in the survival of our fellow organisms and the ecological health of the Earth. To achieve these goals, we must balance issues of economic productivity, ecological health, and societal values.
http://www.upconsult.com/umfsg/umfsg.htm

White Earth Land Recovery Project
The mission of the White Earth Land Recovery Project is to facilitate recovery of the original land base of the White Earth Indian Reservation, while preserving and restoring traditional practices of sound land stewardship, language fluency, community development, and strengthening our spiritual and cultural heritage.
www.nativeharvest.com

Wisconsin Family Forests
Wisconsin Family Forests (WFF) was organized to support private landowners that are interested in learning and applying the concepts of sustainable forestry. WFF consists of neighborhood alliances of local forest landowners that share their experiences and pool their needs for professional assistance and additional knowledge.
http://www.wisconsinfamilyforests.org/

Woodlands Cooperative
http://www.tc.umn.edu/%7Esmit1635/woodlands/woodlands_home.htm

Appendix C: Summary of 2003 Landowner Survey

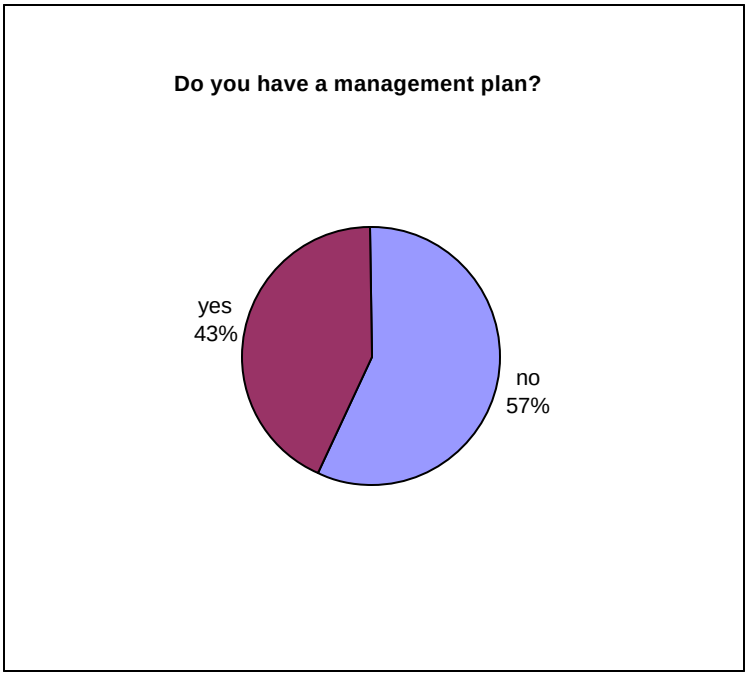
Introduction:

The 2003 Survey of Lewis County Family Forest Landowners was conducted with funds provided by the USDA to the Family Forest Foundation for a Cooperative Feasibility Study. The survey was conducted by the Social & Economic Sciences Research Center at Washington State University. Eight hundred surveys were mailed to family forest landowners in Lewis County. Since the Foundation was most interested in reaching those who would participate in a forestry cooperative, members of the Lewis County Farm Forestry Association were targeted first, this amounted to 190 forest landowners. The remaining 610 family forest landowners were chosen randomly from the Lewis County tax assessor's roles. Three hundred twenty five completed surveys were returned yielding a completion rate of 43% and a standard error of ±5%.

Survey Responses

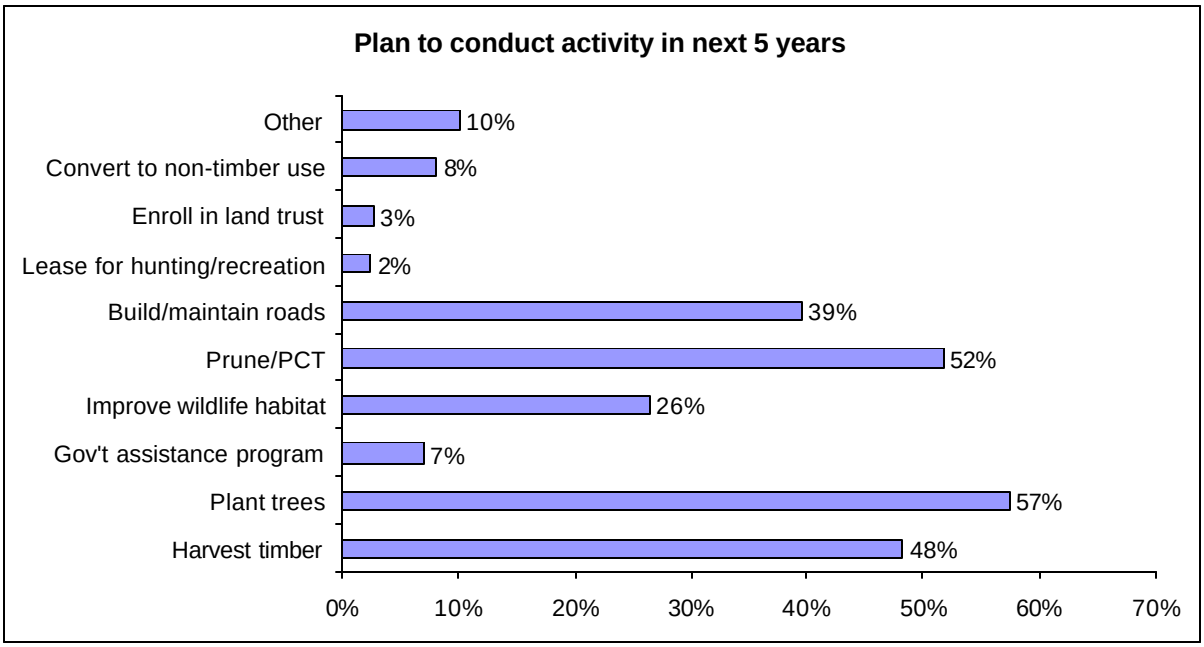
I. Forest Management

Q1. Do you have a forest management plan?



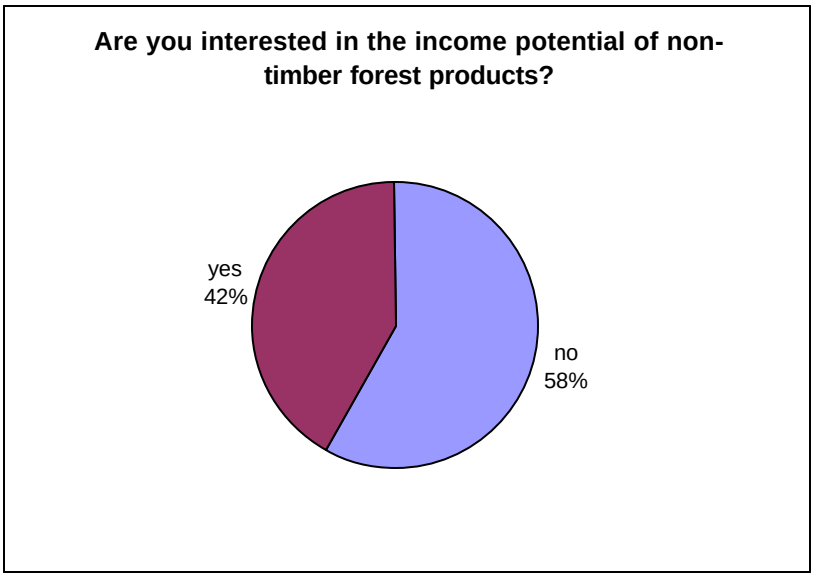
Forty-three percent of the respondents indicated they had a forest management plan. Those respondents who had a forest management plans owned statistically significant more acres than those who did not (p = .0291) with an average of 292 acres. Members of forestry organizations were also more likely than non-members to have a management plan, with 55% of members having a forest management plan compared to 29% of non-members. Those respondents who indicated interest in participating the cooperative did not have statistically significant higher proportion of management plans than respondents who did not express interest in the cooperative.

Q2. Do you anticipate doing any of the following activities with your forestland within the next five years?

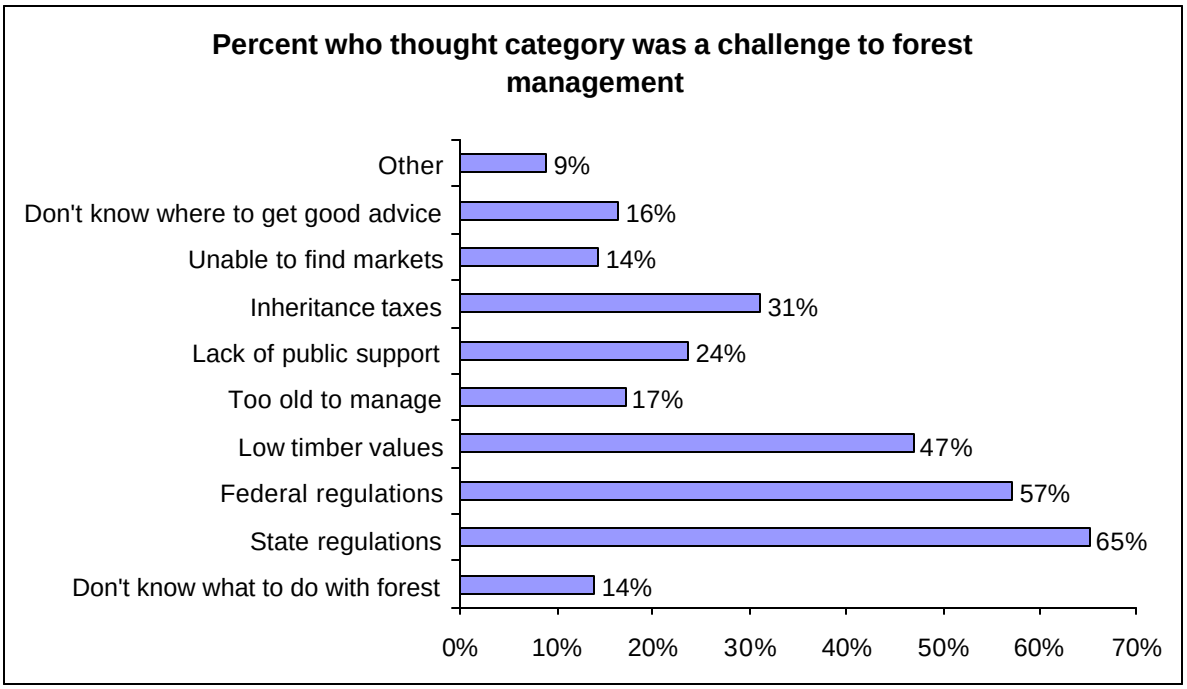


About half of the respondents plan to conduct some harvest activity in the next five years. More plan to plant trees than are harvesting.

Q3. Are you interested in the income potential of non-timber forest products (i.e. berries, floral greens, mushrooms, boughs, etc.) on your forestland?

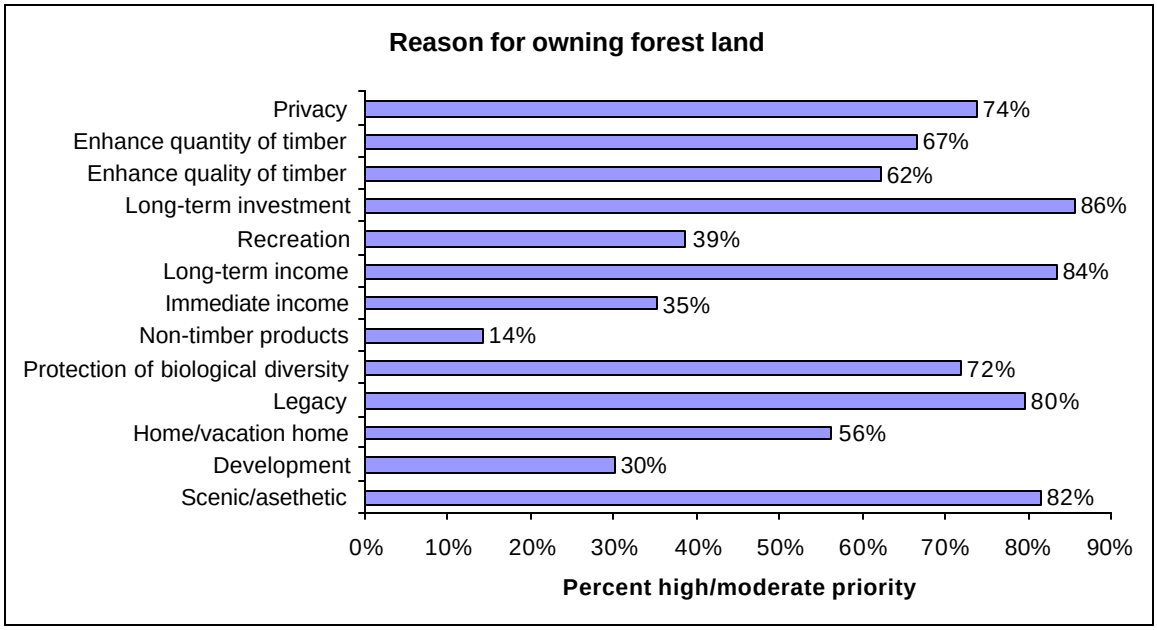


Q4. Which of the following do you consider to be challenging factors in the management of your forestland? (Please check all that apply)



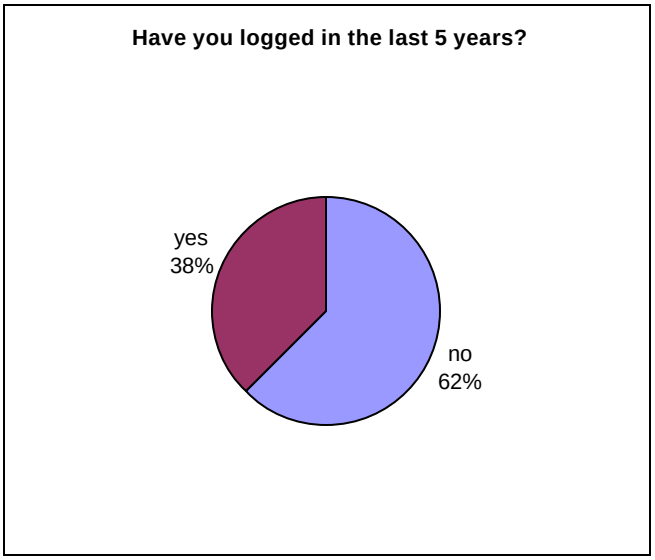
State and Federal regulations were viewed as the most challenging factors to forest management.

Q5. How much priority do you assign to each as reason for your owning forestland? (High, Moderate, Little, No, Don't know)

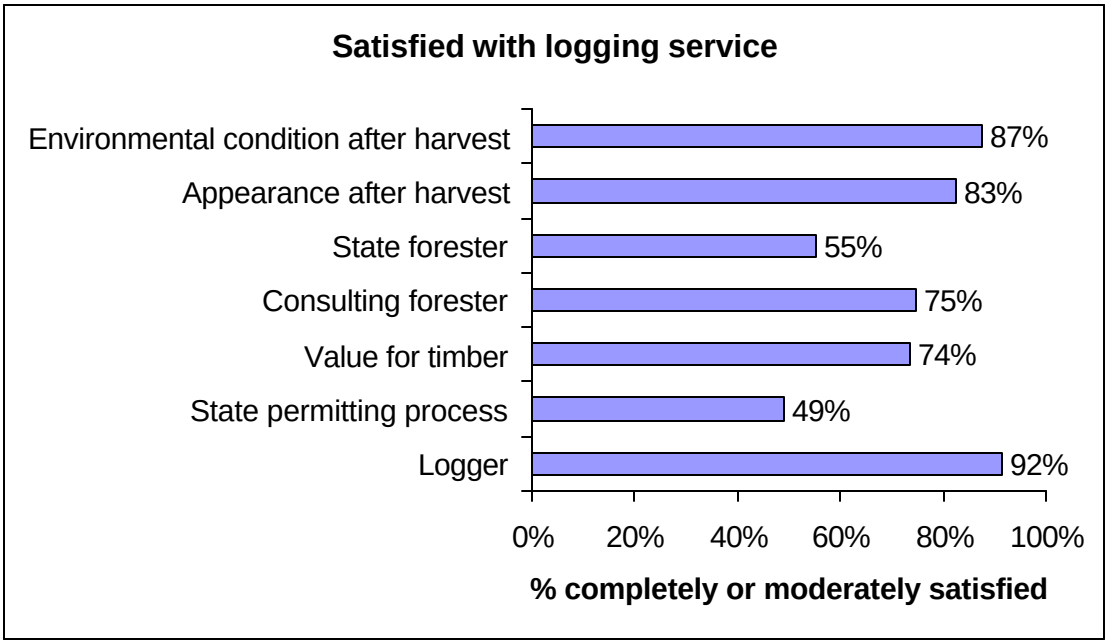


While long-term investment and income are the highest-ranking reasons for owning forestland, non-economic values also rank highly. With 80% of the respondents indicating legacy as a reason for owning forestland along with interests as a long-term investment, this infers that landowners are interested in forestry over the long run, and are not just holding forestland as a short-term speculative venture. Other high-ranking reasons for owning forestland include Scenic and aesthetic values (82%), protection of biological diversity (72%), and privacy (74%).

Q6. Have you logged your forested land in the last five years?

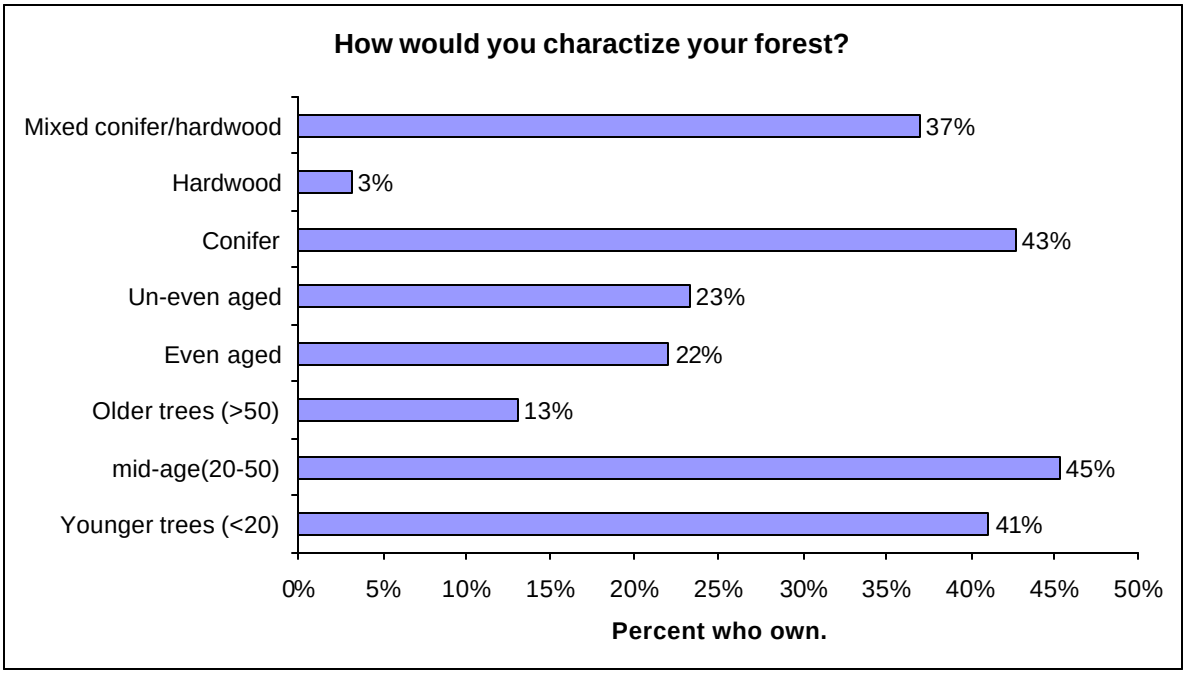


Q7. If you have logged recently, how satisfied were you with each aspect of the logging service?



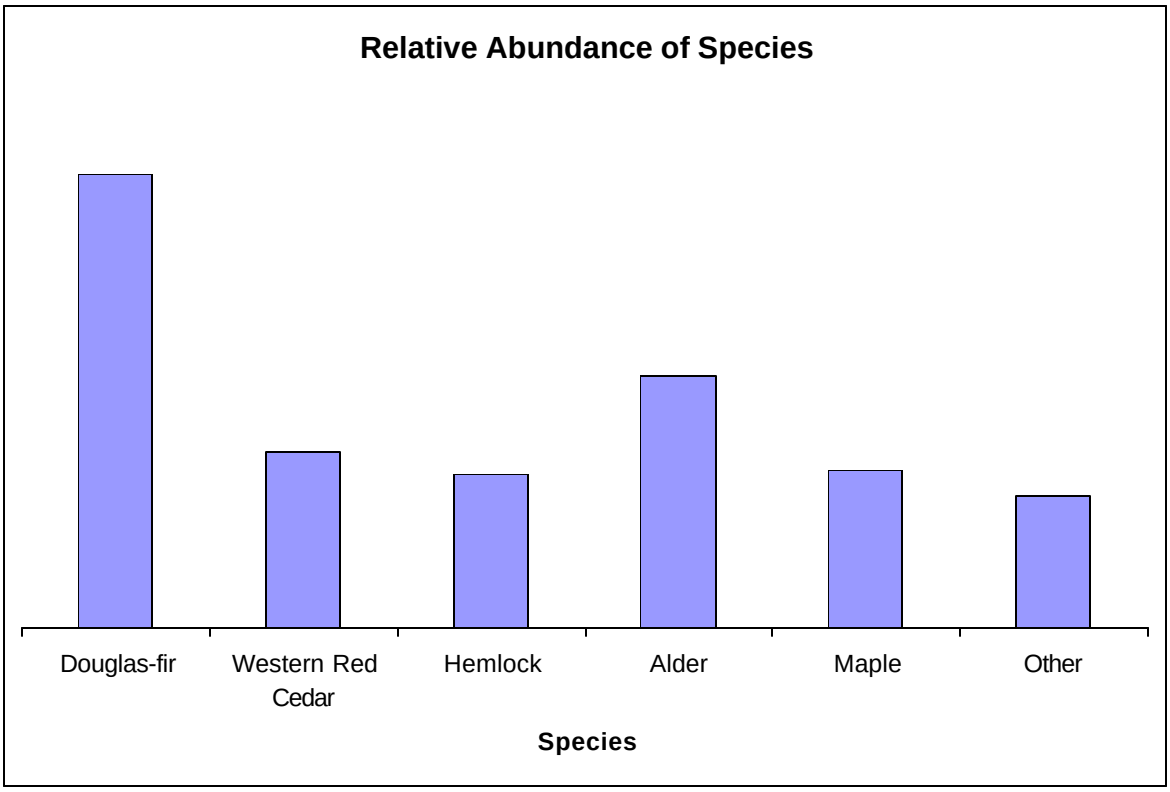
Family forest landowners are overwhelmingly satisfied with the service they are getting from their loggers and the condition of their property following harvest. Three quarters are satisfied with the service they are getting from consulting forests and value they are receiving for the harvested timber. The only category that less than 50% of the respondents were satisfied with is the state permitting process.

Q8. How would you characterize the age and type for most of the trees that comprise your forestland? (Please check all that apply)



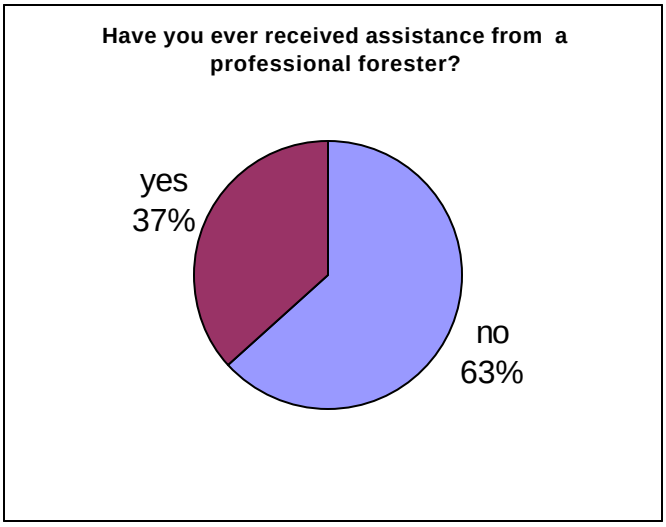
As would be expected for this region, conifers dominate the landscape. Forty-five percent of the trees are 20-50 years of age, this in conjunction with the 13% of trees older than 50 years of age suggests most of the family forest landowners have trees of a harvestable age on their property. The low percentages of even and un-even age are low because most of the respondents left those boxes unchecked.

Q9. Please number the following types of trees in the order of prevalence on your forestland.



There are no units on this graph because of the way response to this question were entered. This was supposed to be a ranking question (1-6). If landowners ranked two species equally they got half a point. I calculated each species average ranking and am graphing that here as relative abundance, the high the bar the greater the abundance. As expected, Douglas-fir is the most abundant species.

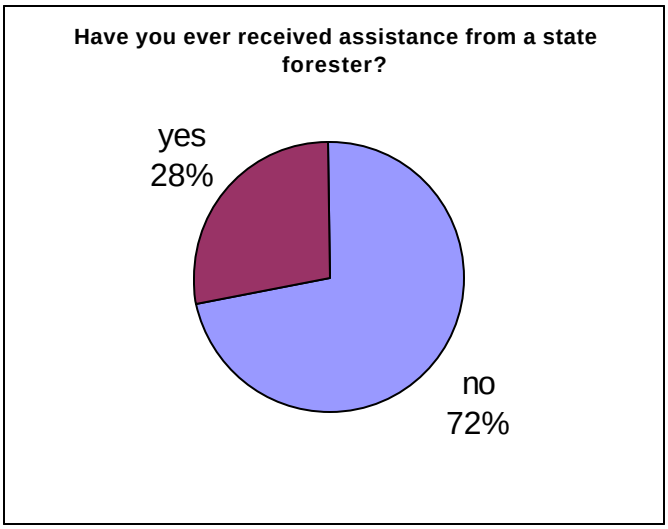
Q10. Have you ever received assistance from a professional consulting forester?



Q11. If yes, how satisfied were you with the services you received?

Of the respondents who indicated using a consulting forester, 87% indicated they were very or somewhat satisfied with the service they received from a consulting forester.

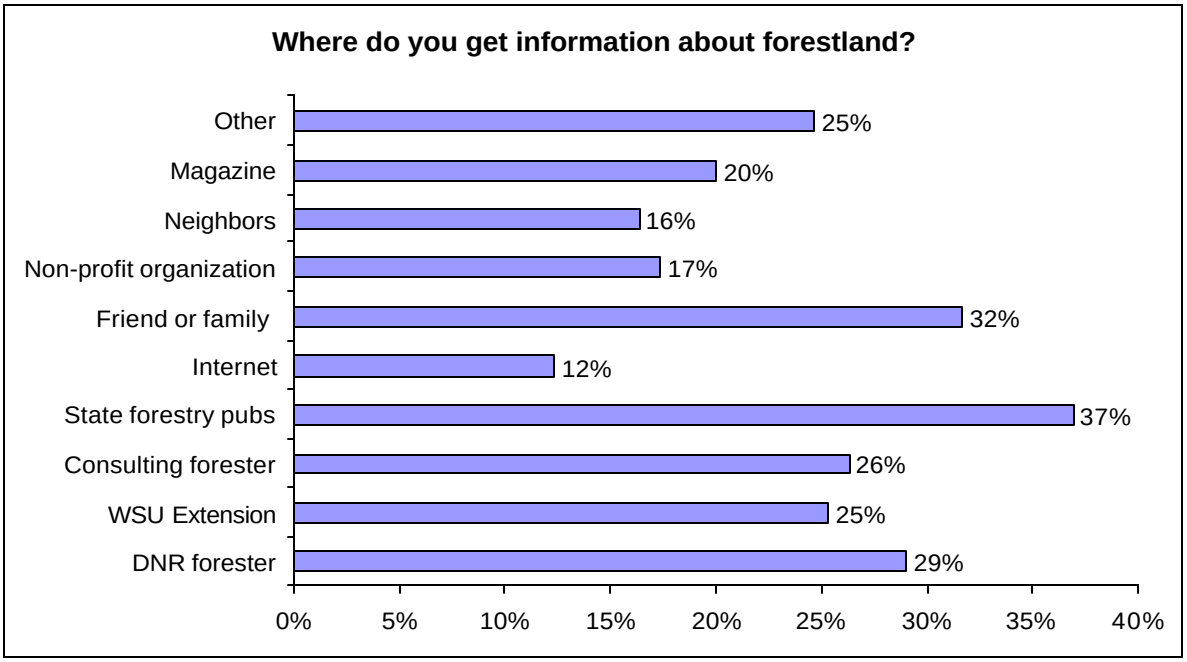
Q12. Have you ever received assistance from a state forester?



Q13. If yes, how satisfied were you with the services you received?

Of the respondents who indicated using a state forester, 89% indicated they ere very or somewhat satisfied with the service they received from the state forester.

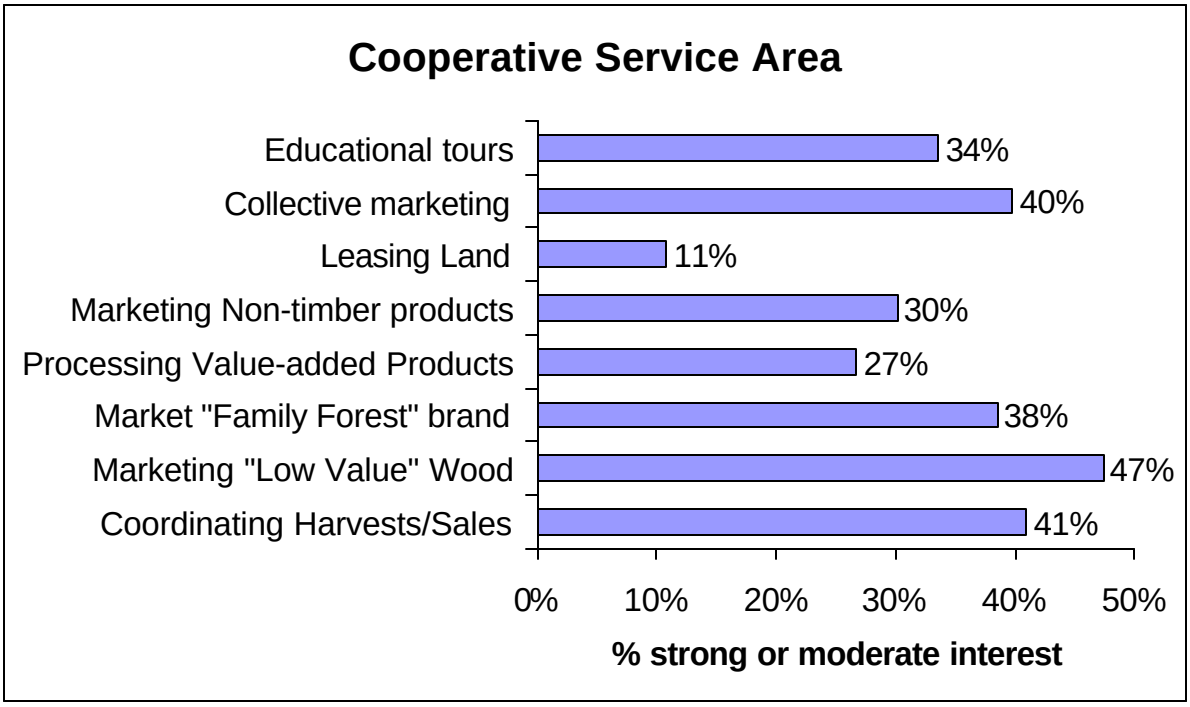
Q14. Where do you get information about your forestland? (Please check all that apply)



This indicates that family forest landowners get their information from a variety of sources with no one source having cornered the information market.

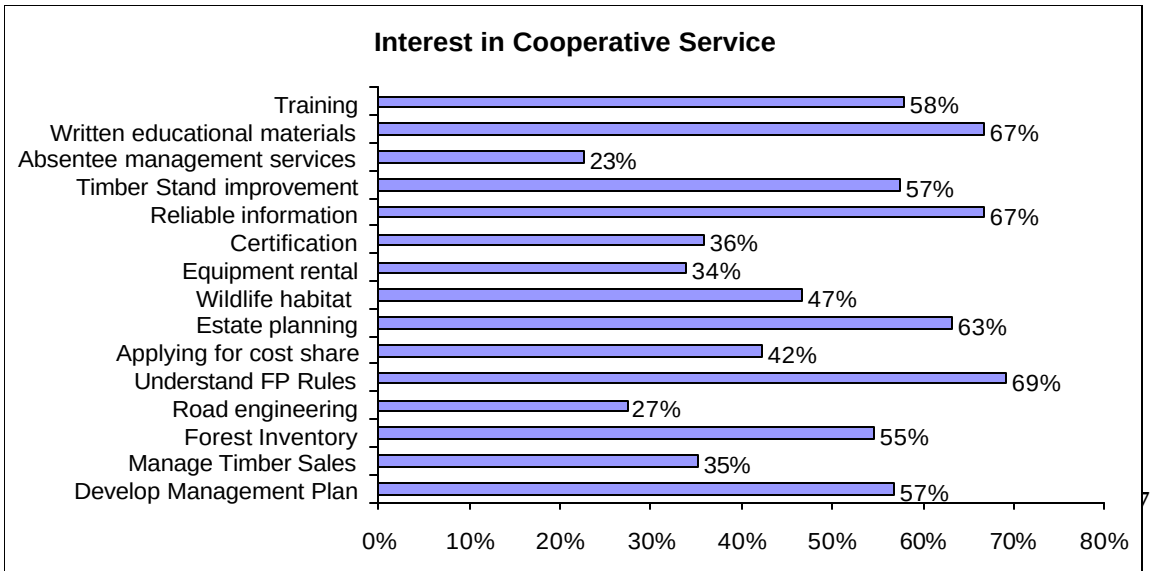
II. Cooperative Services

Q15. How much interest would you have in each of the following service areas if each service was offered by a co-op?



Interest in all types of marketing ranked high.

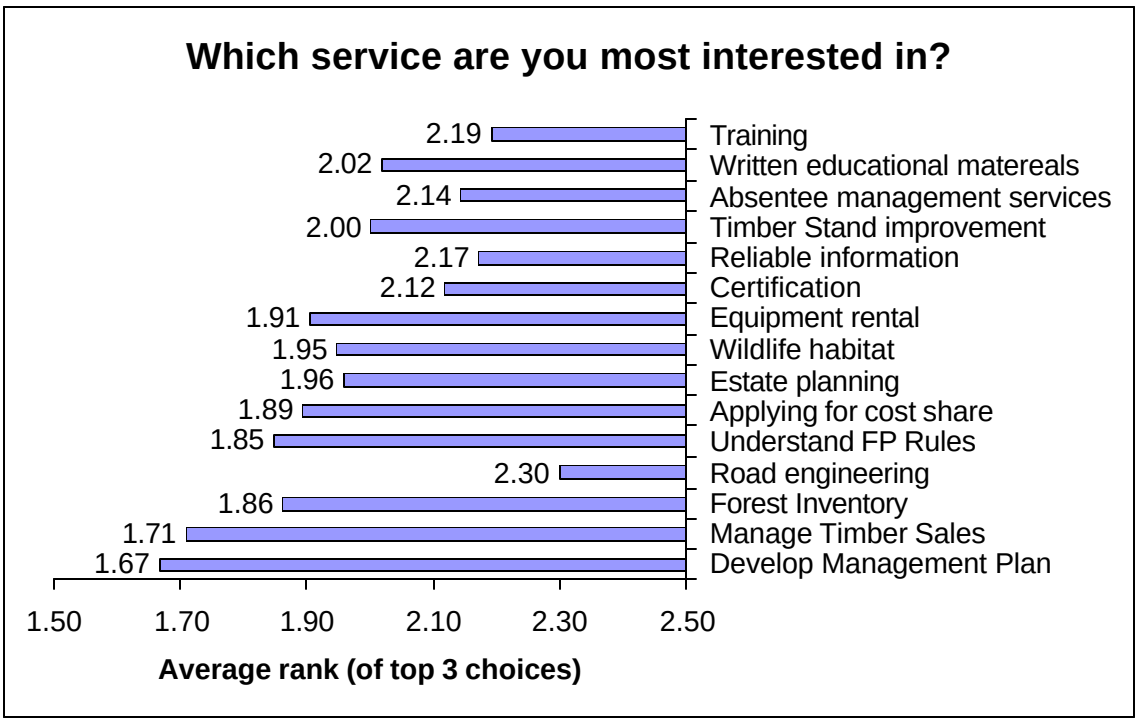
Q16. How interested would you be in each of the following forestry services if they were offered through a forestry cooperative?
Understanding forest practice regulations was the service landowners were most interested in.



Reliable information and written educational materials also ranked high as a service landowners would like. This is interesting when consider Q14 (where do you get your information). No source of information in question 14 was used overwhelmingly more than another with the highest use being state forestry publications at 37%. Responses to Q14 in conjunction with the desire for reliable information indicate landowners are not trusting the information that is available, or do not know where to go to get reliable information. Considering 40% of survey respondents were members of a forestry organization, this is somewhat surprising. This is an area that the Foundation could perhaps fill a void or work with WFFA to get the information out.

Also ranking high as a desired service is estate planning.

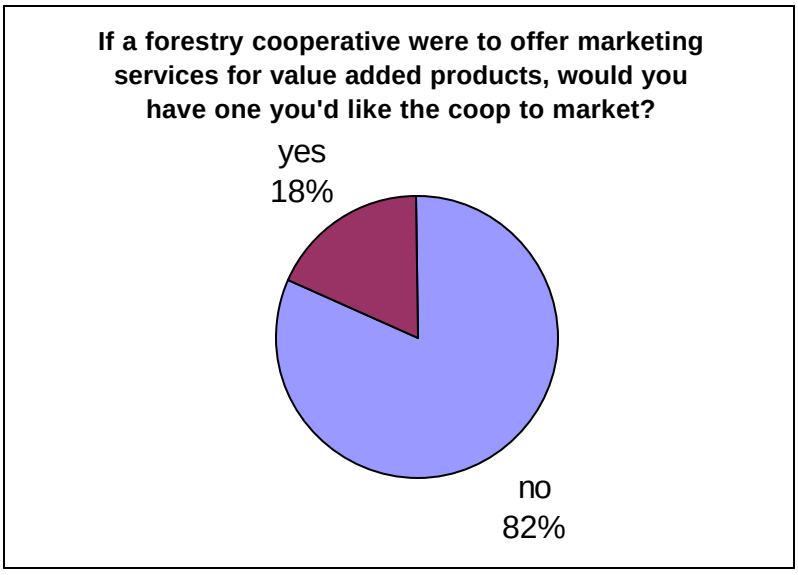
Q17. Which of the forestry services listed in Q16 are you most interested in? (1st, 2nd, and 3rd choice)



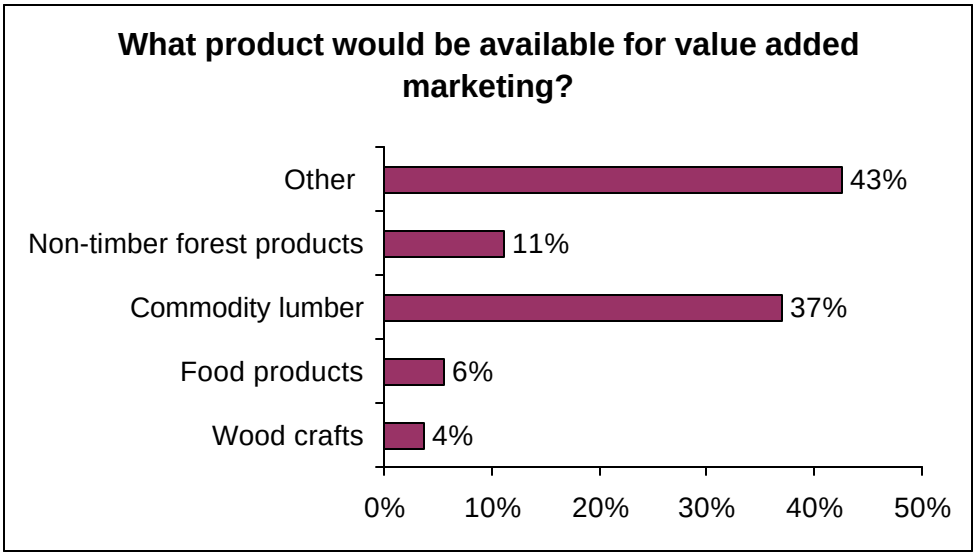
This graph shows the average ranking of each service indicating which service landowners are most interested in. Developing management plans ranked the highest at 1.67 followed by manage timber sales, forest inventory, and understanding forest practice rules.

III. Cooperative Objectives

Q18. If a forestry cooperative were to offer marketing services for value-added forest products (i.e. flooring, furniture, crafts, jams and jellies, rough sawn lumber, etc.) would your have a product you would like the cooperative to market?

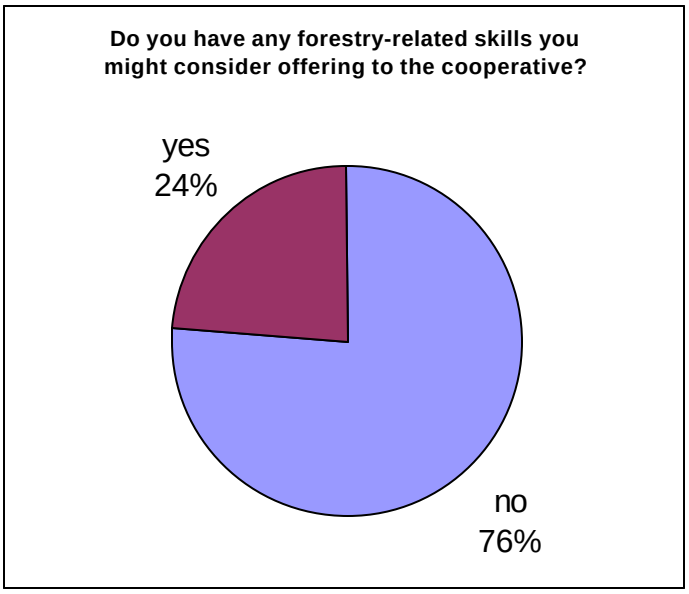


Q19. If yes, which of the following best describes your product?



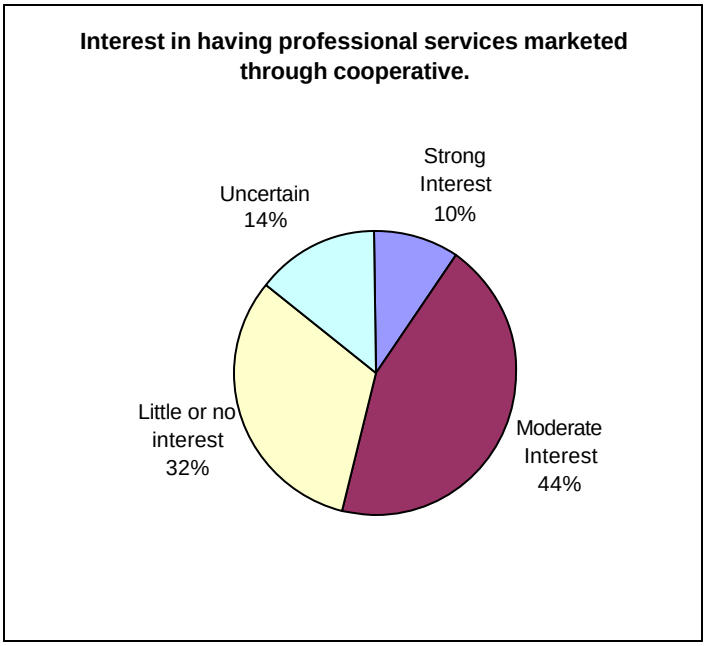
Other ranked high here, but reading the comments for other selection on this question does not really indicate another product, rather the respondents just reiterated the categories that were provided.

Q20. Do you have any forestry-related services or skills (e.g. logger, log-truck operator/driver, carpenter, craftsman, timber marketer, wildlife biologist, timber cruiser, consulting forester, mill operator) that you might consider offering to other co-op members?



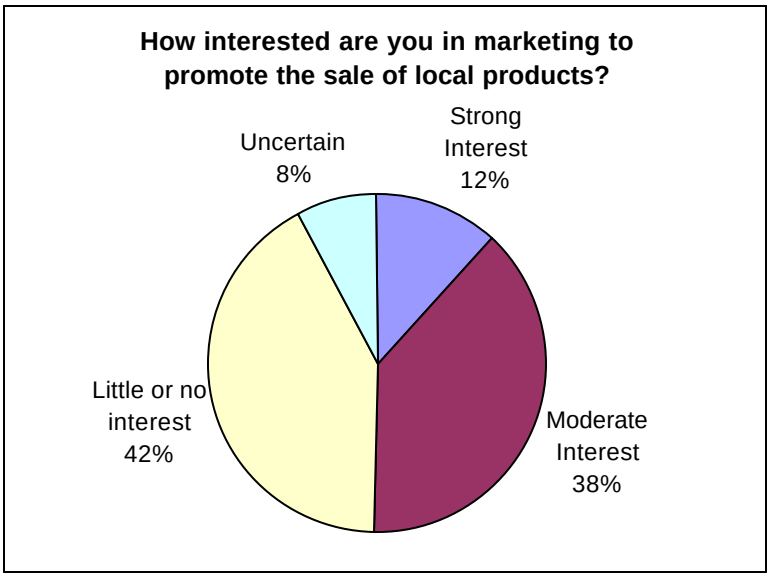
Those who responded yes represents 72 individuals.

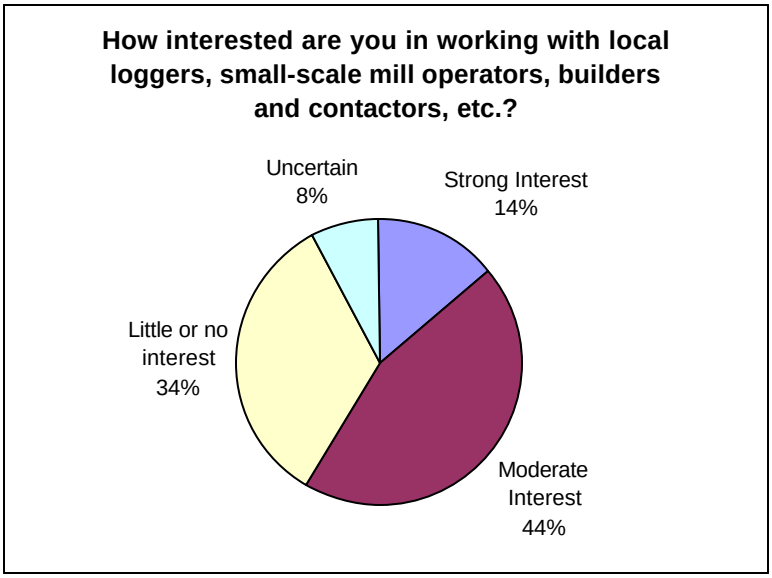
Q21. If yes, how interested are you in having your professional services marketed through a forestry co-op?



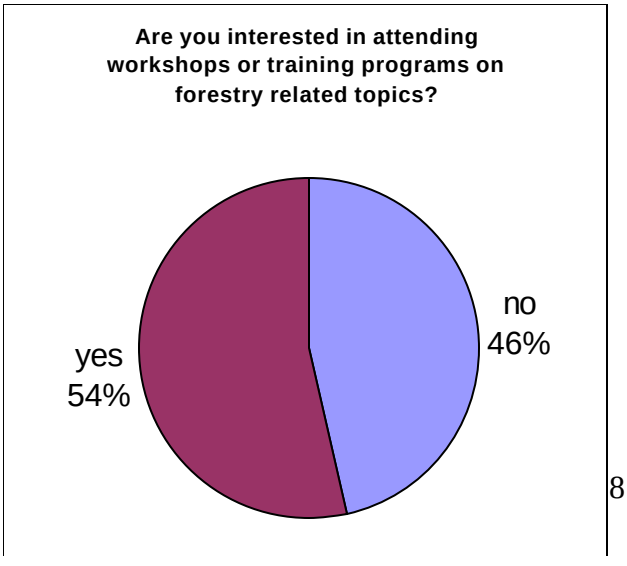
Those who indicated a strong or moderate interest represent 38 individuals.

Q22. How interested are you in…

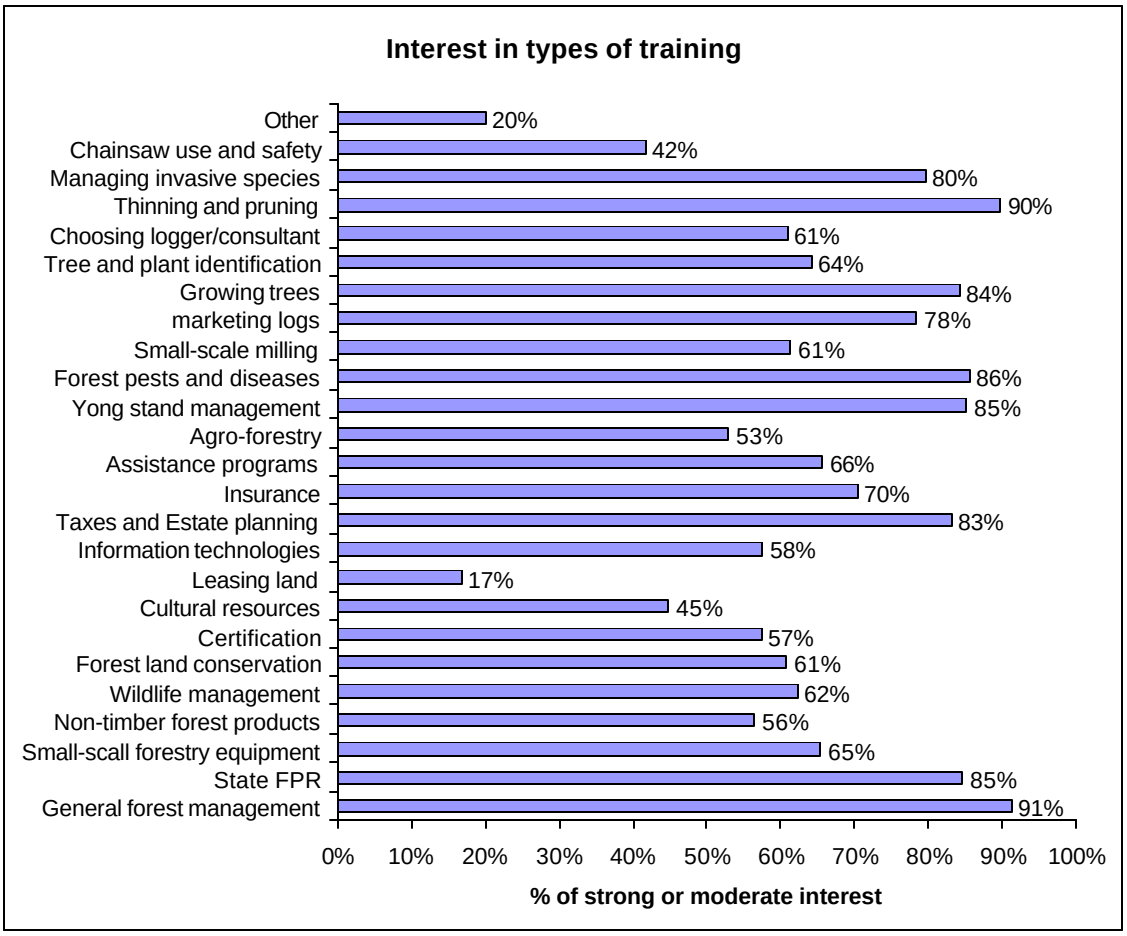




Q23. Are you interested in attending workshops or training programs on forestry related topics?

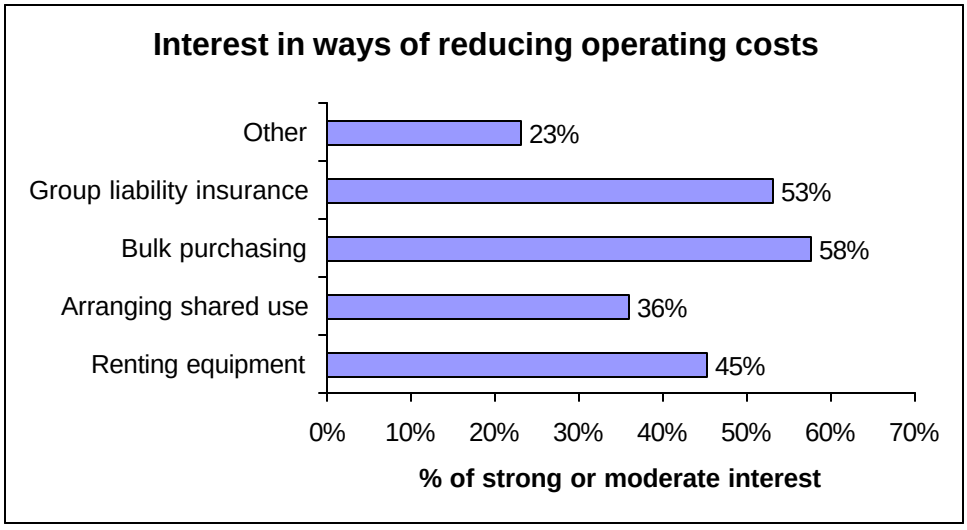


Q24. If yes, how interested are you in learning about:

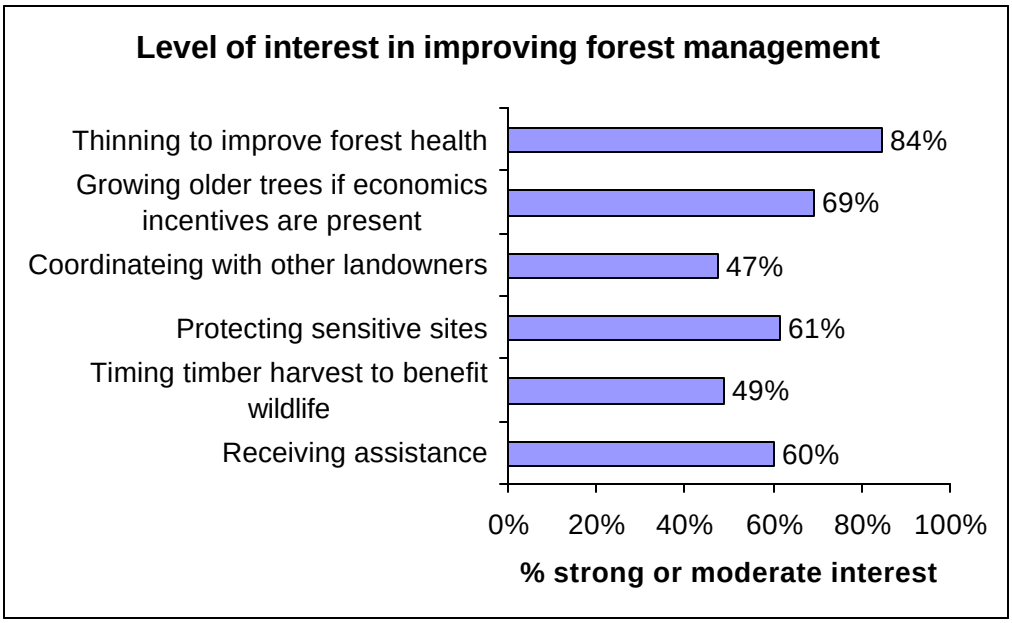


There is strong interest in general forest management (91%), thinning and pruning (90%), young stand management (85%), and other basic forest management activities. Also ranking high is training in understand state forest practice regulations (85%) and Estate planning (83%).

Q25. Please indicate your level of interest in the following ways to reduce operating expenses.

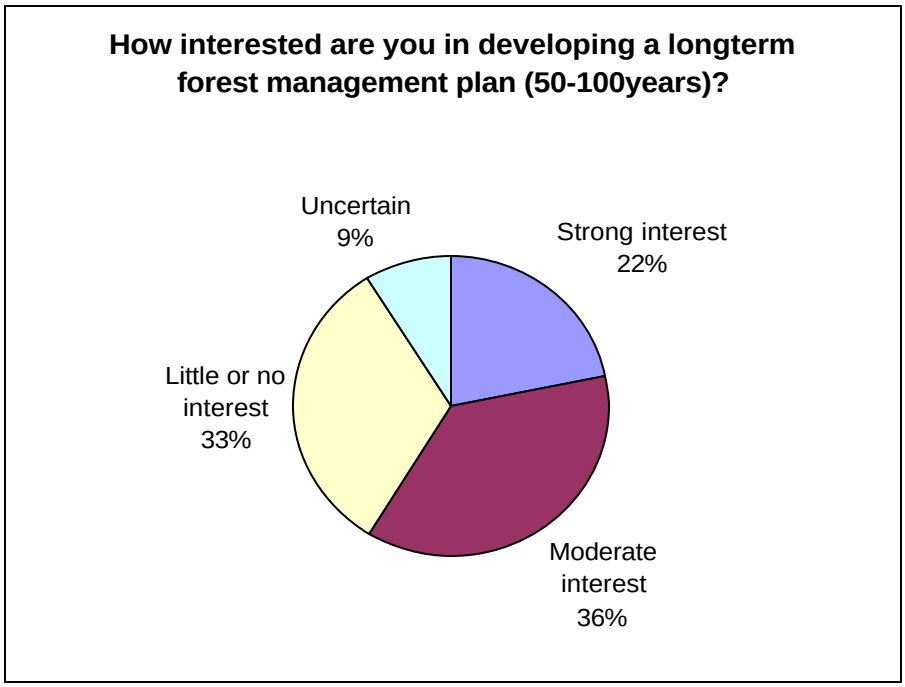


Q26. Please indicate your level of interest in improving forest management..



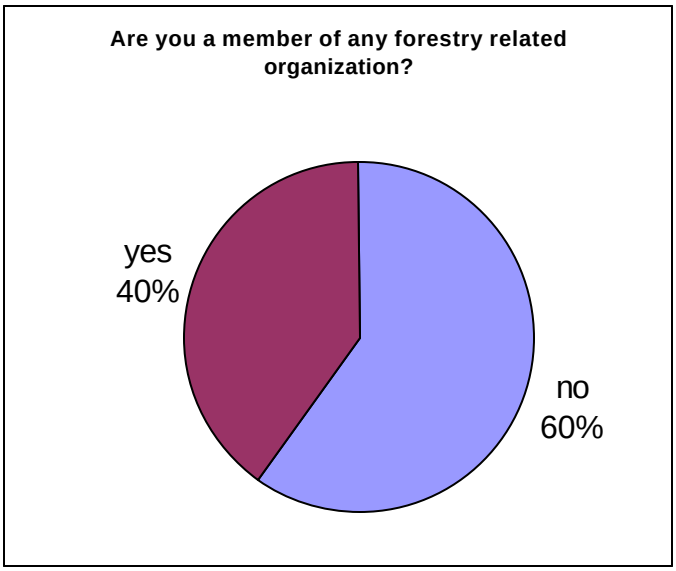
Sixty-nine percent of the respondents would like to grow older trees if it were economical to do so.

Q27. How interested are you in developing a long-term management plan?

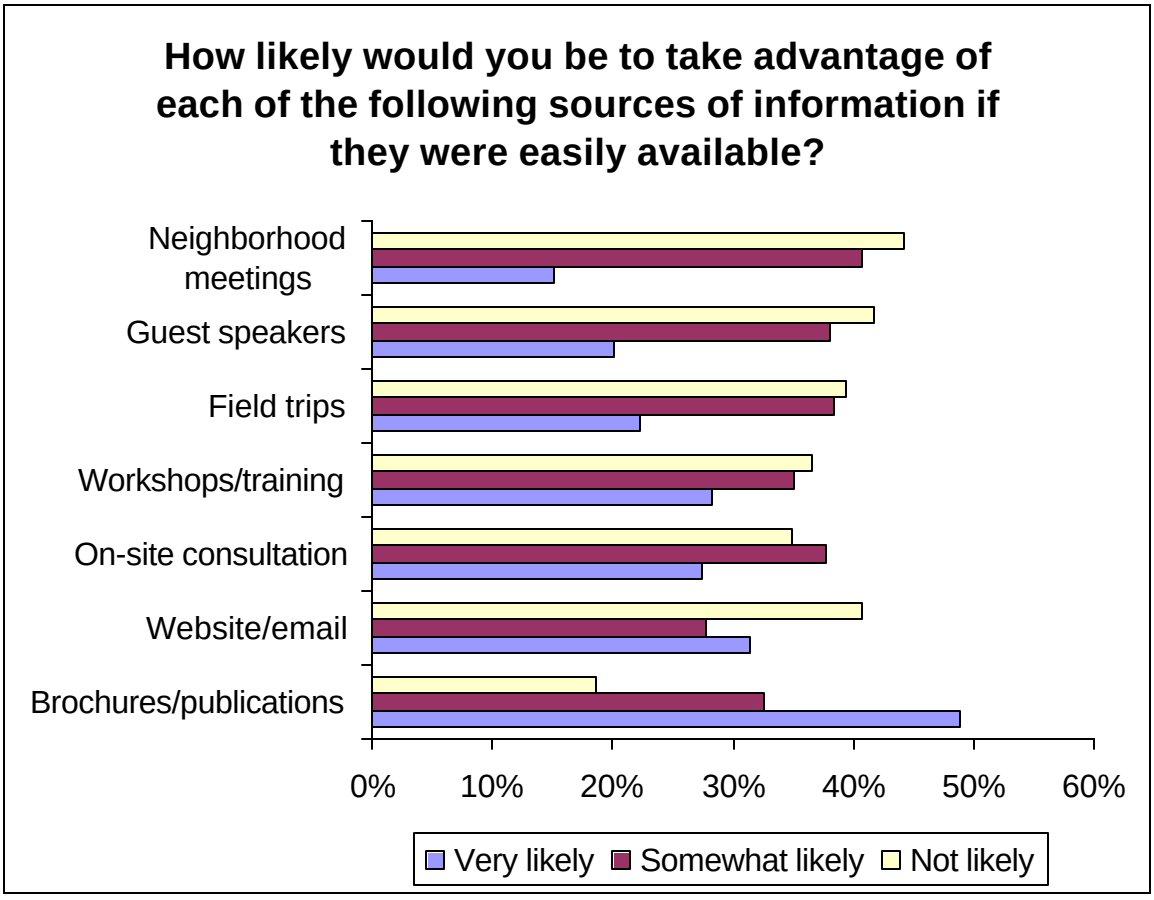


Fifty-eight percent expressed strong or moderate interest in developing a long-term management plan.

Q29. Are you currently a member of any forestry related organizations (e.g. American Tree Farm System, WA Farm forestry Association, Society of American Foresters, etc.)?



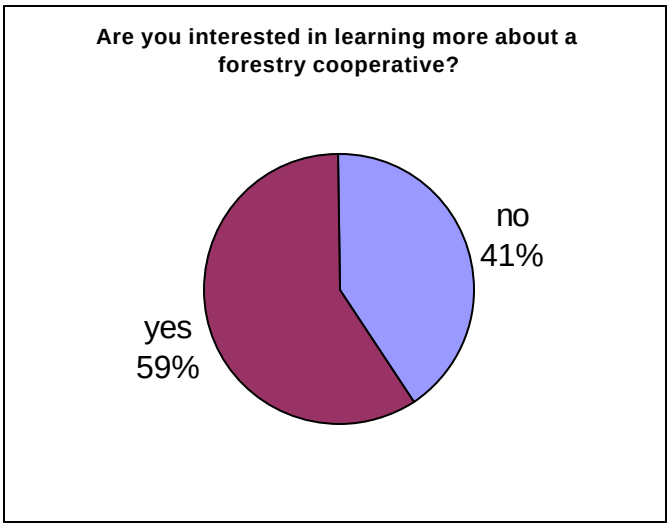
Q30. How likely would you be to take advantage of each of the following sources of information if they were easily available?



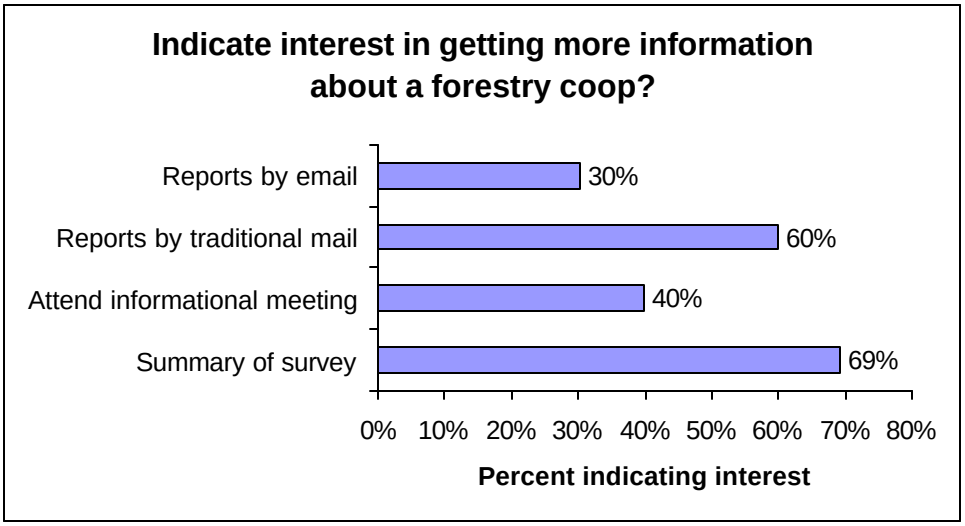
IV Your Interest in Forestry Cooperatives

Q31. Are you interested in learning more about a forestry cooperative?

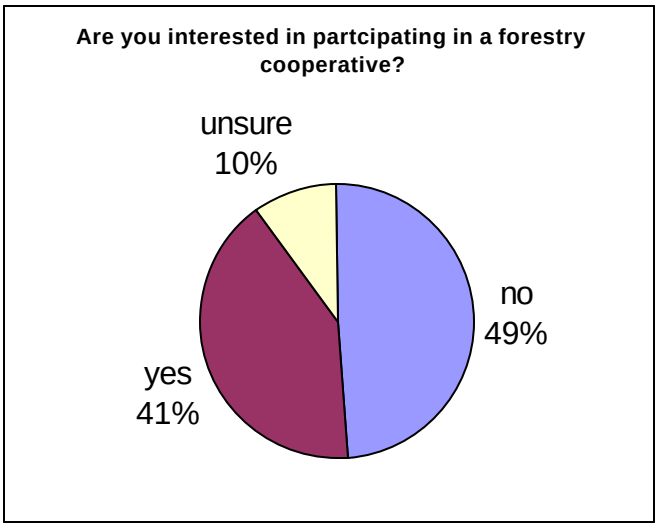
Number of acres owned by those who are interested in more information on a co-op is 25,266 acres.



Q32. Please indicate your interest in getting more information about a forestry co-op?



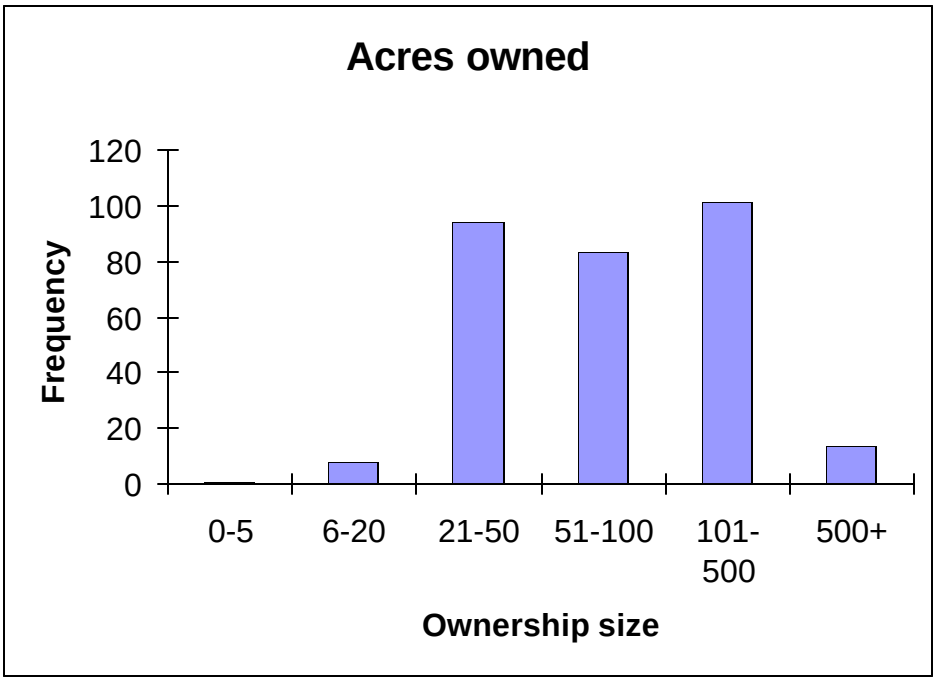
Q33. Are you interested in participating in a forestry co-op?



The number of acres owned by those who indicated interest in a forestry cooperative is 15,905 acres.

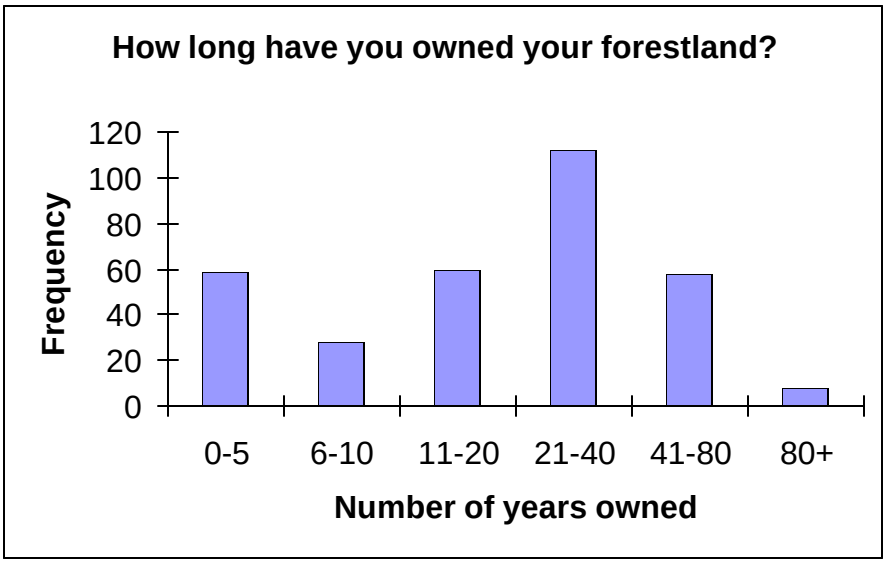
V. Background Information

Q34. How many total acres of land do you own in Lewis County?



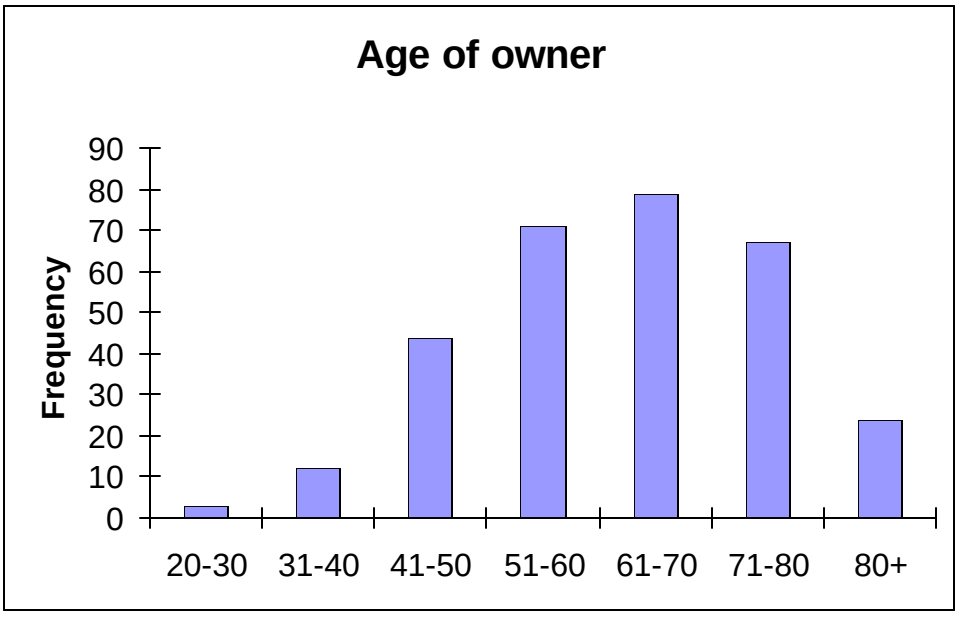
Those who responded to the survey and answered this question owned a total of 55,149 acres, with a mean ownership size of 183 acres, and a median of 80 acres.

Q35. How long have you owned your forestland?



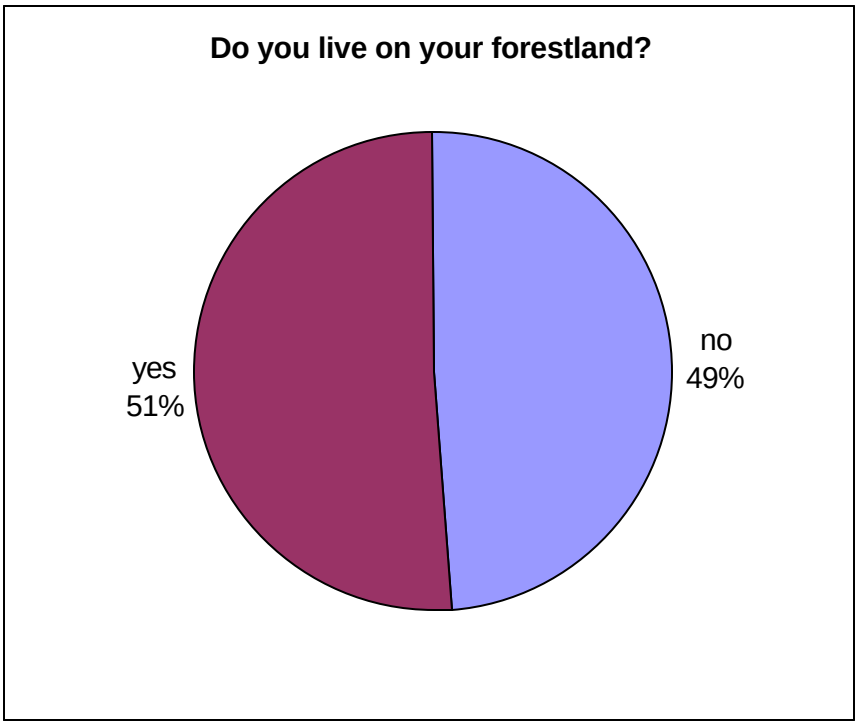
Respondents to the survey owned their forestland for an average of 30 years.

Q36. What is your current age?



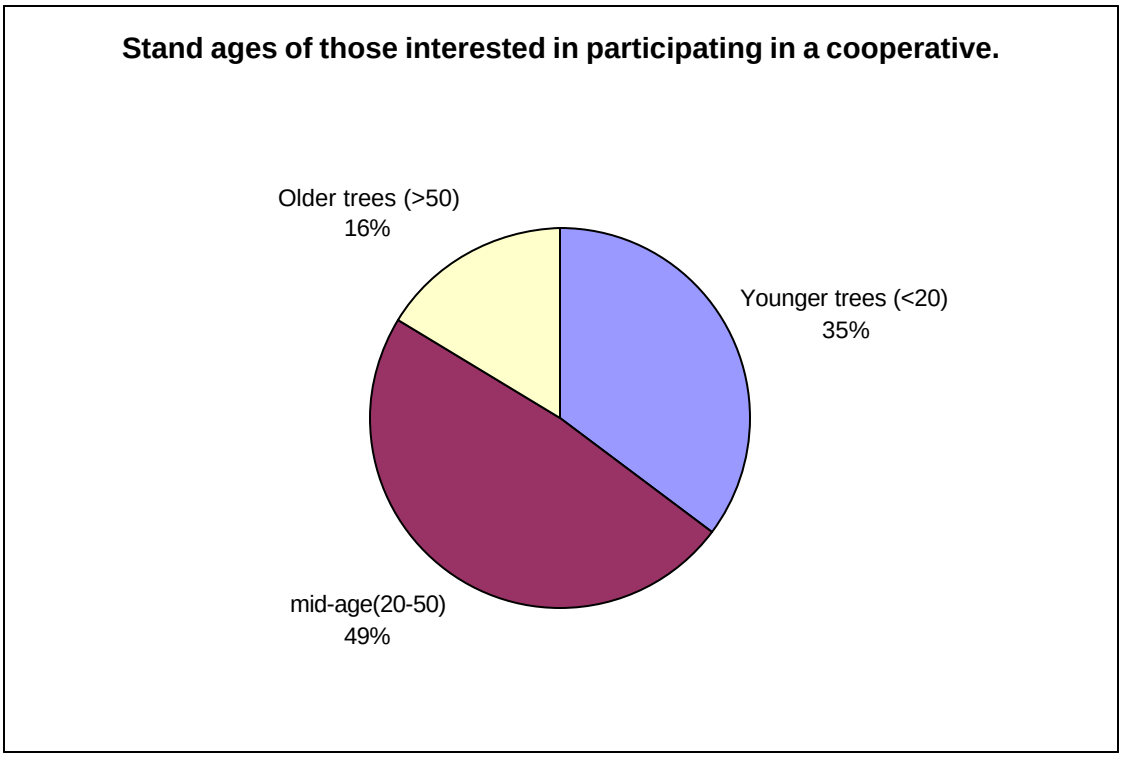
The average age of respondent is 63. Looking at the distribution of ages it is easy to see why estate planning ranked high in early questions. The age distribution also indicates that there will be considerable amount of land changing ownership within the next 10-15 years.

Q38. Do you live on your forestland?

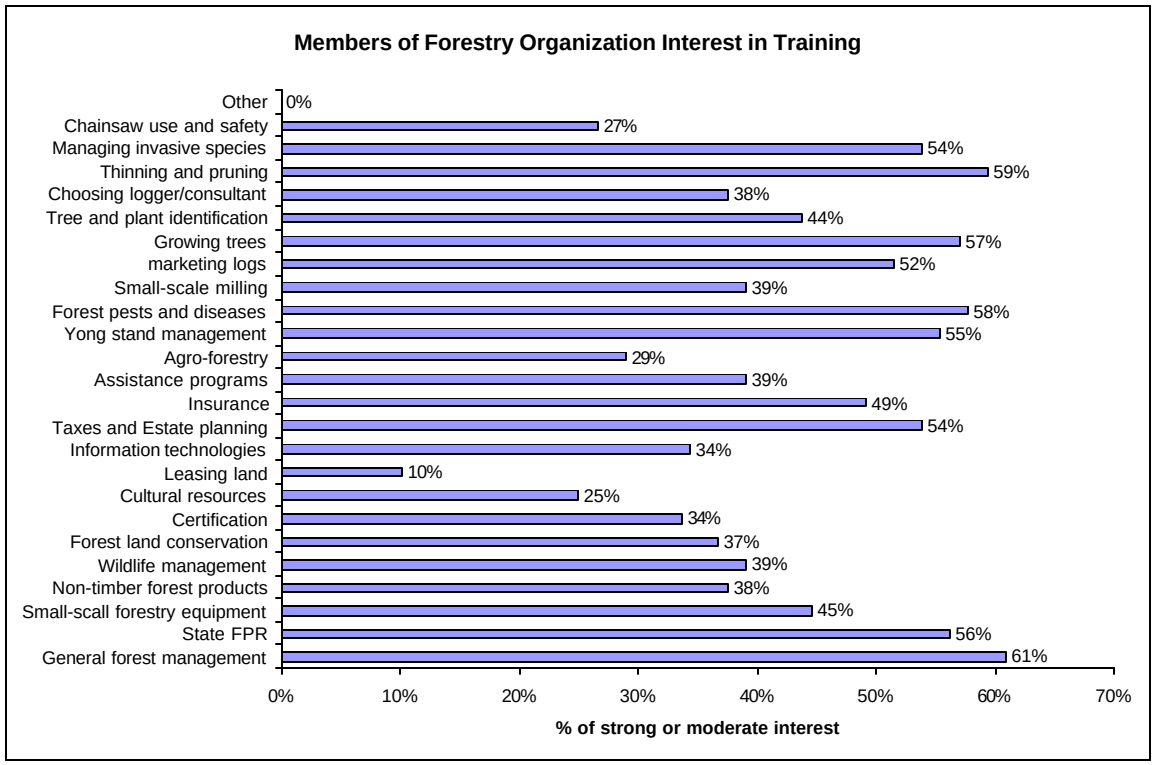


VI. Other analysis

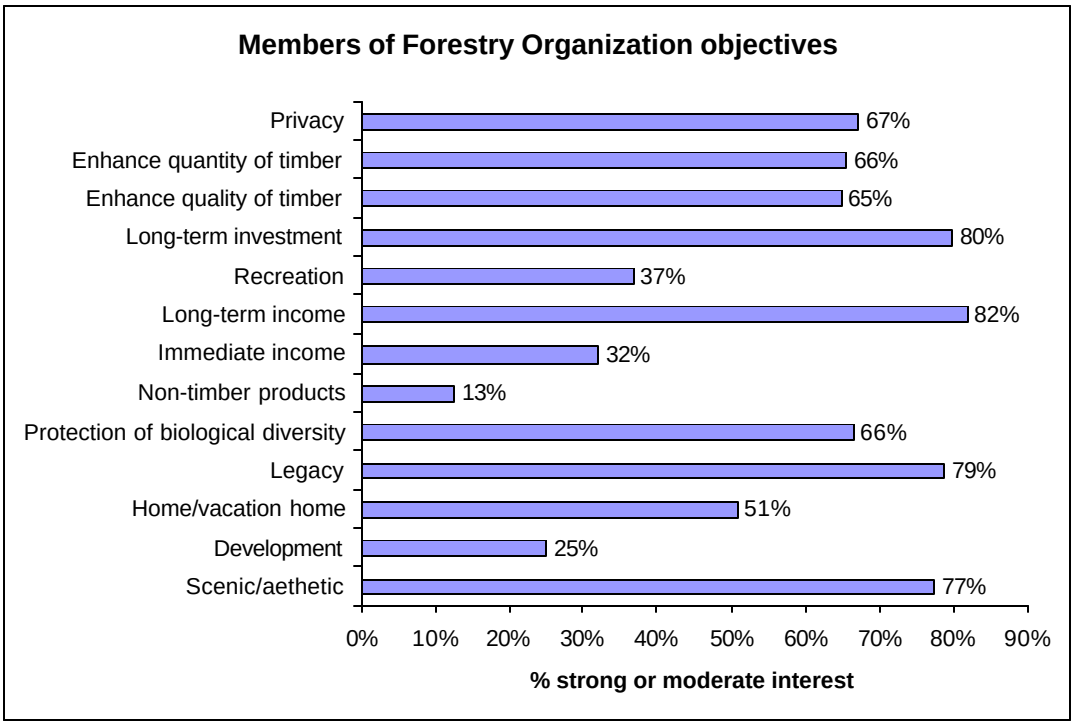
Stand age of those who indicated interest in participating in a cooperative.

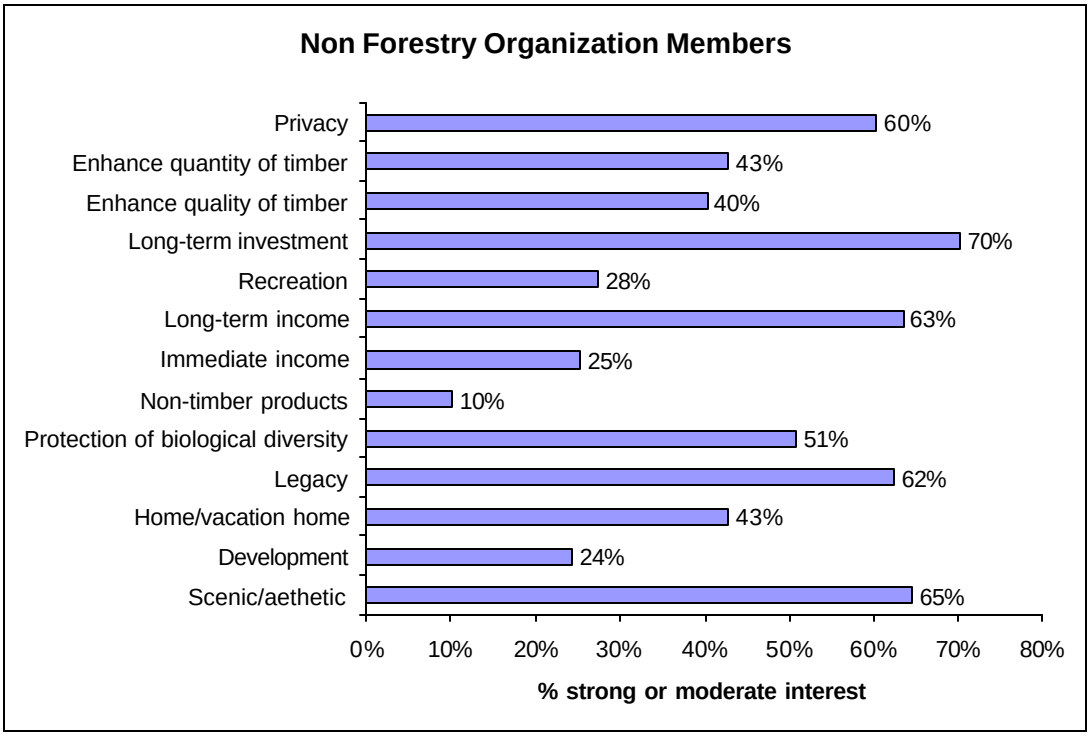


Interest in training for members of Forestry organizations and non-members.



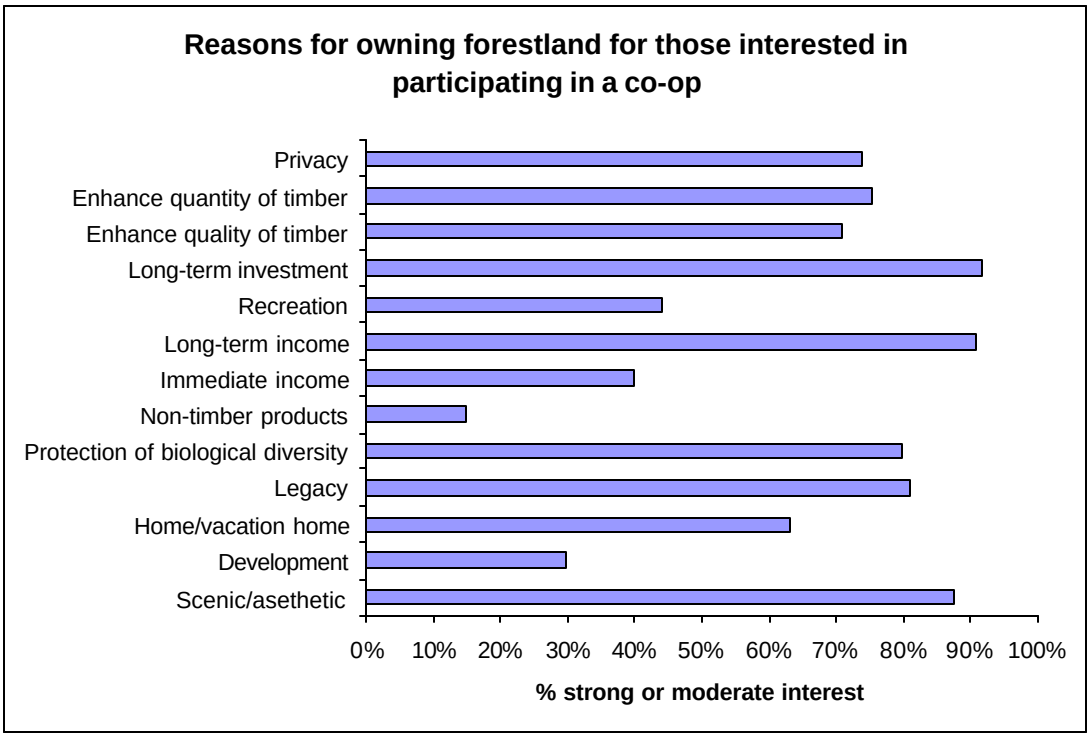
Objectives of forestry organization members vs. objective of non-members.





The objectives of members and non-members follow closely. The only categories that really differ are Enhance quantity and quality of timber. While non-members have the same goals as members they may not be actively managing their forestland.

The reasons for owning forestland of those who indicated they were interested in participating in a forestry cooperative.



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